DOCTORAL THESIS

The role of family in mental health problems among adolescents from community and clinical settings in Cyprus

Demetriou, Constantina

Award date:
2014

Awarding institution:
University of Roehampton

THE ROLE OF FAMILY IN MENTAL HEALTH PROBLEMS AMONG ADOLESCENTS FROM COMMUNITY AND CLINICAL SETTINGS IN CYPRUS

By

Constantina Demetriou, BSc, MSc

A thesis submitted in partial fulfilment of the requirements for the degree of PhD

Department of Psychology

University of Roehampton

2014

ABSTRACT

Family dysfunction has been reported as an established risk factor for the development of mental health problems among adolescents. However, little is known whether this finding can be replicated in Cyprus as previous research has been conducted mostly in the UK, USA and Australia. Furthermore, studies that compare family dysfunction among adolescents in community and clinical settings are rare. Thus, the main aim of this Thesis is to compare the frequency of mental health problems among adolescents, and to investigate the impact of family attachment, functioning and communication.

The present research consists of three studies using a mixed-method research design. A total of 737 adolescents from public schools and mental health units were recruited for study 1 and 2. Adolescents completed a set of questionnaires that measure mental health problems and family factors. The third study used a qualitative research design and involved interviewing 20 adolescents from both settings and their parents.

Results revealed that 11.4% of the adolescents from a community setting experience some form of mental health problems, while the prevalence of these problems among adolescents from clinical setting was 26.6%. Findings of the interview similarly showed that clinically referred adolescents reported having interpersonal problems which impact on their mental health; similar finding could not be replicated among community sample. Attachment was found to be the most significant risk factor of their mental health. Unbalanced/disorganized adolescent-parent relationships were found to be common in clinical setting, while closeness characterized relationships in community setting. In addition, conflict, social isolation and parental separation were also found to be crucial components of an adolescent–parent relationship for clinically referred adolescents.

To conclude, family dysfunction seemed to have an important role in adolescents' mental health problems. Further studies are needed to examine the mechanisms that mediate the relationship between family and adolescent wellbeing.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

I have been very lucky during the course of my PhD to have as my Director of Studies Prof. Cecilia A. Essau who has been patient and motivating throughout. Her advice and guidance was always greatly received. I would also like to thank my second supervisor, Dr. Catherine Gilvarry, for all her advice, time and encouragement. My sincere thanks also go to Dr. Xenia Anastassiou-Hadjicharalambous, Dr. Olga Solomontos-Kountouri and Dr. Olympia Palikara for their advice and constructive comments during the various stages of my PhD. I am grateful to all the adolescents and their parents who participated in my research.

I have really enjoyed my time at the University of Roehampton, which is largely due to all the lovely people who work and study here. I am very grateful to all my colleagues for their support and encouragement. To my non-work friends, in particular thank you for all the support and distraction along the way. I am also indebted to those my friends who helped me through the challenging times and celebrating with me during the good ones.

Finally, special thanks go to my family, who has always been at the other end of the phone whenever I needed advice or encouragement, they have been incredibly supportive and motivating. You have been there, all the time, and believe in me - that is why I am here.

CHAPTER 1: INTRODUCTION

1.1. Context of the Thesis

Adolescence is a border between childhood and adulthood. Like all borders, it's teeming with energy and fraught with danger.

Mary Pipher (1994)

The process of change from childhood to adulthood is marked by enormous emotional, behavioural and physical changes. Adolescence is proposed to represent a developmental period that is theoretically and empirically distinct from both childhood and adulthood. This period is conceptualized as one of numerous choices and possibilities in which different emotions and behaviours associated with both social and psychological developmental functions for adolescents (e.g., affirming individuation from parents, trying to achieve adult status and seeking acceptance from peers), may put adolescents "at risk" of developing mental health problems (Jessor, Donovan, & Costa, 1991). Adolescence has, in the past, been characterized as a period of "storm and stress" (Hall 1904), as it typically generates more turmoil than either childhood or adulthood (Resnick, Bearman, Blum, et al., 1997; Seidman, & French, 2004). It should therefore come as no surprise that mental health problems may surface during this stormy time. In fact, there is a well-established amount of research that has found that presence of mental health problems tend to cluster among adolescents (DuRant, Smith, Kreiter & Krowchuk, 1999).

A study conducted in eight different countries indicated that most mental disorders (e.g., attention-deficit/hyperactivity disorder, oppositional-defiant disorder, conduct disorder, anxiety and depressive disorders, and substance use disorders) have their first onset in adolescence (Kessler, Amminger, Aguilar-Gaxiola, Alonso, Lee, & Ustun, 2007). Other mental disorders (e.g., schizophrenia, alcohol and drug abuse, and eating disorders), suicide and delinquent behaviour also have a peak age of onset during adolescence (Wenar & Kerig, 2005).

Several longitudinal studies among adolescents have shown that mental disorders, which have an onset in adolescence, tend to predict severe mental disorders in adulthood such as depression (Essau, Lewinsohn, Olaya, & Seeley, 2014; Rohde, Lewinsohn, Klein, Seeley, & Gau, 2013). In a follow-up study of 776 adolescents, Pine et al. (1998) reported that depression and anxiety that begin early in life tend to persist over the next two to three decades (i.e. into adulthood). In support, a recent study by Essau et al. (2014) indicated that participants who had anxiety disorders, which had an onset during adolescence, had a poorer psychosocial outcome during adulthood compared to those who experienced the onset of their anxiety disorders at childhood. Specifically, adolescent onset of anxiety disorders predicted poor total adjustment, poor adjustment at work, poor family relationships, problems with the family unit, less life satisfaction, poor coping skills, and more chronic stress in adulthood (Essau, et al., 2014). Adolescent anxiety also predicted the occurrence of substance, alcohol abuse/dependence, and anxiety in adulthood (Essau, et al., 2014). It was argued that the types and clinical characteristics of anxiety disorders, which had an onset at childhood, differed from those that had an onset at adolescence. Anxiety during adolescence affects more the youth compared to during childhood, because of the biological changes of puberty (Hyde, Mezulis, & Abramson, 2008).

A classic study by Loeber (1982) showed that youths with delinquent behaviour are at risk to becoming chronic offenders later in their lives. Similarly, a longitudinal study by Newton-Howes (2004), which followed children and adolescents with ADHD into adulthood, showed that 67% of their sample reported serious problems at the age of 25 with the disorder, which continued to interfere with their functioning.

These studies illustrate the importance of identifying mental health problems in adolescents and the factors that increase their risk of developing such problems. Therefore, cumulative numbers of studies have examined a wide range of risk factors that are associated with adolescents' mental health problems. Jessor (1991) argued that the degree of clustering of any mental health problem is dependent on adolescents' exposure to multiple risk domains from five categories, including biological and genetics, perceived environment, social environment, behaviour and personality. Extending this argument, there is evidence to support the fact that different mental health problems are associated with different risk factors (Claveirole & Gaughan, 2011).

Of these five categories of risk factors, family environment seems to be one of the most consistent factors to have been reported as being associated with adolescent mental health (Barber, 1992, 1996; Bogels & Brenchman –Toussaint, 2006; Levin & Currie, 2010; Keijsers, Loeber, Branje, & Meeus, 2012; Kenny et al., 2013). As stated by Walsh (2003, p.27), "in the concentration of mental illness, family normality become equated with the absence of symptoms, a situation rarely, if even, seen in the clinical settings".

Families are integral to adolescents' mental health, to the extent that they are found to predict both positive and negative outcomes across adolescents (Claveirole & Gaughan, 2011). On the one hand, the evidence suggests that inconsistent care giving,

family conflict, dysfunctional families (i.e. poor family management) and impairment in family communication are risk factors for mental health problems (Patel, Flisher, Hetrick, & McGarry, 2007). On the other hand, however, factors, such as family attachment, a sense of connection, opportunities for positive involvement in family, communicating with family members, an environment in which the expression of feelings and emotions is encouraged, protected against the development of emotional and behavioural problems, were found to be protective factors (Bogels & Brechman-Toussaint, 2006; Williams, Anderson, McGee, & Silva, 1990). Thus family could both act as a protective but also as a risk factor for mental health problems among adolescents.

Although our knowledge of the association between family factors (e.g., attachment, communication, functioning) and adolescent mental health has expanded over the last few decades, most of this information comes from studies conducted in the USA, Canada, Australia and various EU countries. Thus, it is not known if the findings on the association between family factors and youth mental health could be replicated in Cyprus due to differences in socialization practice. Furthermore, almost all previous studies have focused on the association of the family factor and mental health problems either in community or in clinical settings, but not comparing the family factor across these two settings.

Information collected from clinical settings is generally not representative of adolescents with mental health problems, due to bias in service attendance, such as access and selection processes in terms of help-seeking behaviour (Wittchen & Essau, 1993). It could also be argued, when considering previous findings, that there are differences in attachment (Brown, & Wright, 2003) and home environment (Steinhausen et al., 1998) among adolescents in clinical and community settings.

Adolescents from community setting, however, have the ability to generalize findings than studies of clinical samples (Wittchen & Essau, 1993). Consequently, such a comparison is of importance because it enables the examination of specific family factors that might be characteristics of youth in community and clinical settings.

The present Thesis seeks to contribute to current knowledge on the role of family in adolescent mental health by examining adolescents from both clinical and community settings in Cyprus in at least three ways. Firstly, to our knowledge, no studies have been conducted in Cyprus on youth mental health problems, so the prevalence of these problems is unknown. Secondly, among those with mental health problems, the factors that put them at risk in developing these problems are unknown, particularly in relation to the role of family. Thirdly, hardly any previous studies have examined all the key elements of the family environment such as family communication, attachment and function. An examination of all the major components of the family environment enables the investigation of the association between family and adolescent mental health problems, as well as the exploration of the unique contribution of each of these factors on adolescent mental health problems. This information would allow us to tailor the intervention to adolescents in a specific family environment.

Thus, the present aims to investigate both the prevalence of mental health problems in adolescence and the role of the family in the development of such problems. Findings from such a study should have several implications for health care providers who should aim to develop and implement prevention and intervention programmes that involve parents. As Durlak and Wells (1997) argued, research is only beginning to articulate the specific developmental course of major mental health problems in children and adolescents that would permit preventionists to time their interventions and assess their impact most effectively. Therefore, this research should help public services to

develop a parenting and family support system to prevent mental health problems in teenagers and create a family environment that encourage adolescents' wellbeing.

1.2. Objectives of the Thesis

This Thesis examines the association between family and mental health problems among adolescents in community and clinical settings in Cyprus, with a particular focus on family attachment, communication, and functioning.

The specific aims of the Thesis are to explore:

- The prevalence of mental health problems in Cypriot adolescents from both community and clinical settings *(Chapter 5 and 6)*.
- The association between adolescent mental health problems and gender, age *(Chapter 5 and Chapter 6)*.
- The relationship between family factors and adolescent mental health problems from a community sample *(Chapter 5)*.
- The relationship between family and adolescent mental health problems from a clinical sample *(Chapter 6)*.
- Any differences between adolescents from community and clinical settings in relation to their family's influence *(Chapter 6)*.
- Adolescents' and their parents' perceptions of their relationship *(Chapter 7)*.

This Thesis refers to mental health problems for research purposes and not for diagnostic purposes. For this reason, the term "mental health problems" is considered more appropriate than "mental health disorders". "Mental health disorder" is a clinically

recognisable set of symptoms, experienced as considerable distress and substantial interference with personal functions (Williams & Kerfoot, 2005). "Mental health problem" is a broader term and includes emotional and behavioural problems, which may cause distress or concern and may arise from a wide range of risk factors, including genetic or environmental factors (Claveirole & Gaughan, 2011). In this Thesis, the terms "emotional and behavioural problems" and "psychopathology" are referred to mental health problems.

In this Thesis, instead of applying the categorical approach for assessing adolescent mental health problems, the Achenbach's dimensional approach (i.e. Youth Self-Report, Achenbach, 1991b) was used. The later identifies disorders within DSM (APA, 2000) and ICD (WHO, 1992) classification systems, using standard diagnostic interviews, which are very time-consuming to administer. For this reason, it seems inappropriate to use standard diagnostic interview in the present research. The dimensional approach, often referred to as the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2001), uses instruments that can be easily administered and completed by the participants independently in a relatively short time (Achenbach, Dumenci, & Rescorla, 2002).

As argued by Rescorla et al (2007), the dimensional approach that uses the Youth Self Report (Achenbach, 1991b) is preferable when there is a need for an instrument to assess behavioural and emotional problems in a diverse society and where the aim is to obtain descriptive information about such problem. Given that one objective of this Thesis is to obtain descriptive information of adolescent mental health problems, the Achenbach approach seems to be the most appropriate.

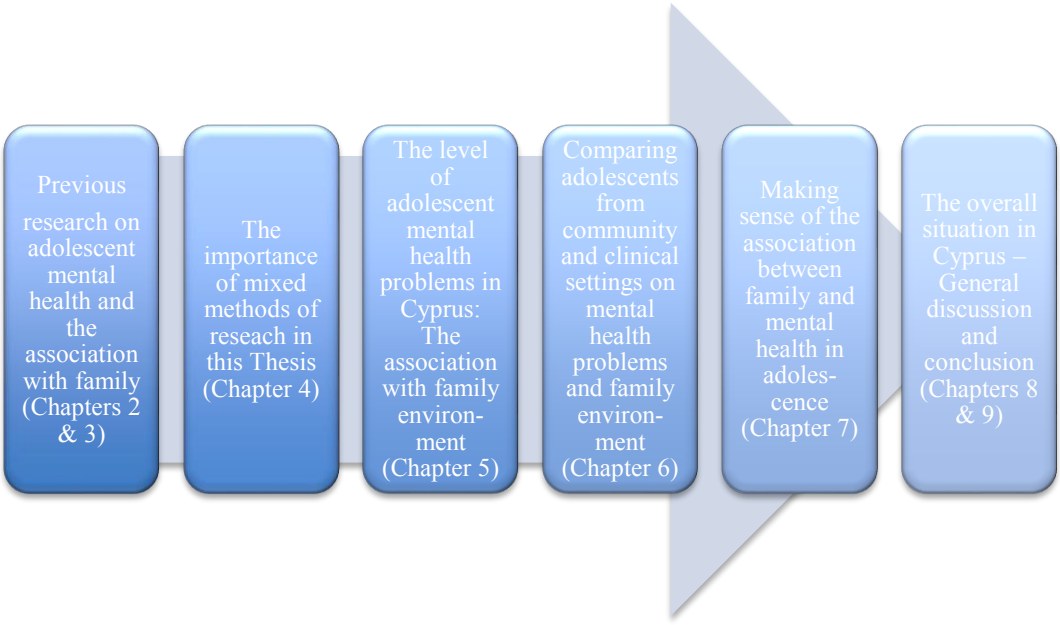
1.3. Structure of the Thesis

Chapter 1 gives an overview of the Thesis, including the context of the research and the research aims. The background research into the topic is provided in the following two chapters. Chapter 2 presents a critical review of the literature on mental health problems during adolescence. Chapter 3 explores the existing literature on the impact of the family environment, with a focus on parents, on adolescent mental health problems. Chapter 4 is a research methodology section in which a brief description of the assessment instruments is presented.

Having described the rationale, research aims and objectives of the studies in this Thesis, the existing relevant literature and methodological context of the Thesis, I will then focus on answering the research questions in the following Chapters. Chapter 5 (Study 1) focuses on the prevalence of mental health problems in Cypriot adolescents, and the association between mental health problems and the family environment. This chapter focuses on adolescents from a community setting. Chapter 6 (Study 2) compares the prevalence of mental health problems among adolescents from community and clinical settings. This chapter then compares the association of family factors to mental health problems in these two settings. Chapter 7 (Study 3) uses qualitative approach to examine in depth the relationship between adolescents and their parents. In order to obtain a comprehensive picture of this relationship, both the adolescents and their parents from both community and clinical settings were interviewed separately.

Chapter 8 discusses and synthesizes the findings of the three studies. The clinical and theoretical implications of the findings are also discussed. Finally, Chapter 9 presents a summary of the Thesis and sets out its conclusions.

Figure 1.1 Conceptual Processes of the Thesis



CHAPTER 2: ADOLESCENT MENTAL HEALTH (LITERATURE REVIEW)

2.1. Overview

As defined by the World Health Organization, adolescence is the period from 10 to 19 years of age (WHO, 2009). In this period of rapid growth and development, adolescence can be viewed as a transitional period from childhood to adulthood (Larson, & Wilson, 2004). It is the time when young people develop a safe and clear space, when they come to terms with their cognitive, sexual, emotional and psychological transformation (UNICEF, 2011). According to Erikson (1968), during adolescence, the ego struggles to master identity crisis and role diffusion. This is because adolescence is a "turning point, a crucial moment" (Erikson, 1968, p.16) in which youth masters the challenge of finding a fulfilling vocation in order to avoid stagnation and regression (Wenar, & Kerig, 2005).

Most adolescents make the transition from childhood to adolescence without any emotional and behavioural problems. However, for some individuals, the reversed picture showed that moodiness, self-deprecation and delinquent behaviour reach a peak in adolescence (Jonhson & Wolke, 2013). Findings from previous studies have shown that a number of disorders have their onset during adolescence. According to previous epidemiological studies, numerous factors (e.g., gender, age, peers and family) have been identified as being associated with adolescent mental health problems (Jonhson & Wolke, 2013). However, the most consistently reported risk factor of mental health problems among adolescents is family (Fatori, Bordin, Curto & de Paula, 2013;

Goodman, Fleitlich-Bilyk, Patel & Goodman, 2009; Goodman, Slobodskaya & Knyazev, 2005).

In support, according to Higgins and Parson (1983), adolescent mental health problems were also negatively affected by interpersonal and environmental changes, such as puberty and increase of autonomy. For example, a lack of preparedness for the assumption of full adult responsibilities may result in internal and external conflicts (Ciccheti & Rogosch, 2002). This is because autonomy has a vital meaning during one's teenage years, signifying that an adolescent is a unique person, capable of behaving independently by thinking, feeling and making moral judgments of his/her own (Steinberg, 1990).

2.2. Adolescent Mental Health Problems

As defined by the World Health Organization, mental health is more than the absence of diagnosable mental health problems. It is a state of well-being in which every individual realizes his or her own potential, can work effectively, can cope with the normal stresses of life, and is able to make a contribution to his or her community (WHO, 2007). However, a lack of wellbeing may suggest a risk of mental health problems. As noted in the introduction (Chapter 1), adolescence is a developmental stage that is associated with a high prevalence of mental health problems, including a wide range of emotional (such as, anxiety, depression, withdrawal) and behavioural problems (with conduct, aggression, anti-social behaviour, delinquent behaviour, hyperactivity and attention difficulties) (Aggleton, Hurry & Warwick, 2000; Essau, 2006; Johnson & Wolke, 2013; Meltzer, Gatward, Goodman & Ford, 2000).

As mental health problems are not a unitary construct (Achenbach, 1985; Quay, 1986), researchers have often used empirical methods in an attempt to define multiple

dimensions or types of adolescent mental health problems. Currently, the field is dominated by two general approaches to taxonomy: (a) the categorical approach which is based on the DSM (APA, 1994) and ICD (WHO, 1992) classifications; and (b) the dimensional approach, the most commonly used being the self-report questionnaire (i.e., the Youth Self Report) which was developed by Achenbach (Achenbach, 2009). The categorical approach views disorders as either present or absent (APA, 1994), whereas the dimensional approach relies on the assessment of dimensions of function or dysfunction, by reducing phenomena to numerous dimensions which an adolescent can experience (Werry, 1985).

The dimensional approach is associated with empirically derived approaches for assessment. Items on checklists and questionnaires are used to elicit the symptomatology of broad classes of disorder, or to elicit a general sense of distress. Individuals with high problem scores can be considered "cases" (Achenbach, 1991a). One of the most widely used instruments is the Youth Self-Report (YSR) (Achenbach, 1966) which have been used in over 30 countries (Rescorla, et al., 2007), and in both clinical and community settings (Visser, van der Ende, Koot & Verhulst, 2003). The Youth Self-Report suggests that mental health problems tend to occur together without any assumptions about their nature or causes (Achenbach, 1991b). In addition, the Youth Self-Report has been reported to be more reliable, and allows for a greater description of multiple symptom patterns than clinically classification systems (Mash & Barkley, 2003).

According to Achenbach (1991b), emotional and behavioural problems can be categorized into eight empirically based syndromes, which have proven to be an effective way of classifying mental health problems among adolescents (Achenbach, Becker, Dopfner, Heiervang, Roessner, Steinhausen & Rothenberger, 2008; Achenbach,

Dumenci & Rescorla, 2002). These syndromes are Anxious/Depressed, Withdrawn, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Delinquent Behaviour and Aggressive Behaviour:

- *Anxious/depressed problems* include excessive fear and worry and are characterised by changes in emotions like sadness, crying or feeling worthless (Achenbach, 1991b) and hopeless (Briggs, 2009). They can be associated with anxiety (such as panic, generalized anxiety disorder, and phobias) and depressive disorders.
- *Withdrawn syndrome* contains withdrawal, shyness and secretive behaviour (Achenbach, 1991b). Adolescents with these characteristics tend to prefer to be alone, not to enjoy life, to feel a lack of energy and to avoid talking to others (Butcher, Mineka, Holley & Carson, 2004).
- *Somatic complaints* are related to physical problems such as nausea, headaches or stomach problems without any medical reasons (Achenbach, 1991b). This syndrome is also related to somatoform disorders (Achenbach, Dumenci & Rescorla, 2002).
- *Social problems* include behaviour such as acting young, being clingy, not getting along with peers, clumsiness and preferring to play with younger children (Achenbach, 1991b).
- *Thought problems* are associated with psychotic disorders such as schizophrenia and bipolar depression (Achenbach, 1991a). Some characteristics of a psychotic disorder include hallucinations, a loss of contact with reality, delusional thoughts and an inability to experience pleasure (Ivarsson & Larsson, 2009; National Institute of Health, 1997).

- *Attention problems* cover three types of behaviour: hyperactivity, (restless and constant movement), inattention (the inability to focus one's attention on anything) and impulsiveness (acting too quickly and without thinking) (Claveirole & Gaughan, 2011). Adolescents with attention problems tend to have problems with concentration, are nervous and impulsive (Achenbach, 1991b).
- *Delinquent behaviour* is a condition in which the young person usually shows little concern for others and violates their basis rights (Achenbach, 1991b). Some examples of delinquent behaviour include theft, lying, setting fire to things, stealing, cheating and vandalism (US Department of Health and Human Services, 1999).
- *Aggressive behaviour* includes such behavior as arguing, screaming, bragging, showing off, attention seeking, teasing, being demanding, acting in a threatening manner and displaying a temper (Achenbach, 1991b). This syndrome is related to conduct disorder and oppositional defiant disorder (ODD).

The above eight syndromes have been classified into two broader categories: Internalizing and Externalizing problems (Achenbach, 1991b; Hopwood & Grilo, 2010). Internalizing problems reflect emotional problems such as anxiety, depression, withdrawal or somatic complaints, where individuals become easily distressed and thus have difficulty in coping with stress (Achenbach, 1991a; Susman, Dorn, Inoff-German, Nottelman & Chrousos, 1997). Externalizing behavioural problems reflect aggressive and delinquent behaviours (Achenbach, 1991a), where are likely to deviate (Osgood, Wilson, O'Malley, Bachman & Johnston, 1996).

In addition, the previous literature on adolescence supports the effectiveness of distinguishing emotional and behavioural problems as Internalizing and Externalizing (Barber, 1992; Krueger, 1999; Roelofs, Meesters, Huurne, Bamelis, & Muris, 2006). Specifically, some researchers have argued that one implication of the use of this framework is that comorbidities between different disorders may be easily conceptualized as Internalizing and Externalizing problems (Hopwood & Grilo, 2010). For instance, regarding a patient having depression and anxiety disorders, practitioners could refer to an Internalizing problem that is likely to lead to multiple problems that occur in both disorders, thus minimizing the assumption of comorbidity between anxiety and depression (Hopwood & Grilo, 2010).

2.2.1. Prevalence of Adolescent Mental Health Problems

Information about the prevalence rates of mental health problems is a helpful source for treatment and prevention (Costello et al., 2011). These several large-scale epidemiological studies on the prevalence of youth mental health have been conducted using the YSR in numerous countries. Findings of these studies have indicated prevalence rates of mental health problems among adolescents to be high, with rates ranging from 9.8% (in Italy, as cited by Frigerio, Rucci, Goodman, Ammaniti, Carlet, Cavolina, De Girolamo, et al., 2009) to 30.4% (in India, Pathak et al., 2011) (Table 2.1). Taking these studies together, the results indicate that at least one out of five young people in the general population would suffer from at least one mental disorder during adolescence. This prevalence is also supported by the mental health report of World Health Organization (2001), which suggested that worldwide between 10% and 20% of children and adolescents suffer from a mental illness.

Table 2.1: Prevalence of any mental health disorder in adolescents from different countries

Study	Year of Publication	Country	Instrument	Number of Participants	Age	Prevalence %
Pathak et al., 2011	2011	India	YSR	1150	12-18	30.4%
Sawyer et al., 2008	2008	Australia	CBCL, YSR	4500	4-17	14.1%
Steinhausen, 2006	2006	Switzerland	CBCL, YSR	1964	7-16	22.5%
Thurston et al., 2008	2008	USA	YSR	224	11-18	10.8%
Erol et al., 2010	2010	Turkey	YSR	2206	11-18	10.1%
Frigerio et al., 2009	2009	Italy	CBCL,	3418	6-18	9.8%

YSR = Youth Self-Report (Achenbach, 1991b); CBCL = Child Behaviour Checklist (Achenbach, & Edelbrock, 1983). SDQ = Strengths and Difficulties Questionnaire (Goodman, 2001)

Nevertheless, the prevalence of mental health problems also differs across disorders. In some societies like the USA and Chile, the prevalence of anxiety and depression among adolescents were higher compared to the prevalence of other disorders such as attention-deficit/hyperactivity disorder (Costello, Mustillo, Erkanli, Gordon & Angold, 2003; Vicente et al., 2012). Studies have also shown a high rate of attention-deficit/hyperactivity disorder and oppositional defiant disorder among adolescents in Puerto Rico (Canino et al., 2004).

The evidence is mixed for whether rates of Internalizing problems are higher than those of Externalizing problems. For example, in Germany, conduct disorder was found to be the most common disorder in adolescents (15.5%), with anxiety disorder coming second (14.3%) (Ravens-Sieberer, et al., 2008), while the percentage of Italian adolescents with Externalizing problems was found to be 1.2% and with emotional disorders 6.5% (Frigerio et al., 2009). The prevalence in Switzerland was similar to that found in the Italian data, indicating that the most frequent disorder was anxiety (11.4%), followed by tic disorders (6.0%), whereas the least common were attention-deficit hyperactivity disorder (5.2.%) and conduct disorder (1.1%) (Steinhausen, 2006).

The reasons for these inconsistent findings are unclear. According to some authors, the difference in rates could have been explained by several cultural issues. For example, higher rates in Internalizing problems may be explained by the fact that some countries promote socialization patterns that favour behavioural restraint (Wong et al., 2012) while others are more anxious about self-image (Yabuuchi, 2004). However, it is also important to bear in mind that cultural differences are also reflected in the methodology of diagnosis (Achenbach, Rescorla, & Ivanova, 2012; Roberts, Attkisson, & Rosenblatt, 1998). As argued by Rescorla et al. (2007), people in Asian countries are more concerned with their self-presentation than those in Europe and America, a tendency that may account for the low scores of the YSR found in China and Japan (Rescorla, et al., 2007).

Exploring further the impact of cultural background of individuals, cultural psychiatry has formed evidence on how different societies present the content and form of normal and abnormal behavior (Fabrega & Miller. 1995; Kleinman, 1988 as cited in Parron, 1997). There is evidence that a person's cultural background colours a mental health problem, from the content of the problem to the unique meaning of expressed emotions (Canino & Alegria, 2008). Factors such as the expression of specific symptoms, the framework of evaluation and the meaning attached to these symptoms have been found to be influenced by culture (Mezzich. Kleinman. Fabrega. & Parron. 1996). For example, rates of hyperactivity in Hong Kong (Ho et al., 1996) are double those reported in other countries. The suppression of anger, aggression and strong emotions is part of Chinese culture. This cultural suppression may lead parents and clinicians to have a lower threshold for the hyperactive behaviour of a child and there is, therefore, an increased likelihood of reporting hyperactive and disruptive behaviour (Canino & Alegria, 2008).

In addition, by using Achenbach's Child Behavioural Checklist, Weisz et al. (2006) observed that there were syndromes in young Thai persons that were not presented in US youth. Specifically, they found that Internalizing problems among Thai boys and a covert delinquent syndrome among Thai girls were not found among young people in the US (Weisz et al., 2006). Moreover, Murad et al. (2003) compared self-reported emotional and behavioural problems between Turkish and Dutch adolescents and found that Turkish girls scored higher on Internalizing problems than Dutch girls, while Turkish boys scored lower on Externalizing problems than Dutch boys. While ethnic differences on Somatic Complaints and Social Problems could be explained by socio-economic measures such as educational level of parents, differences in Withdrawn and Anxious/Depressed behaviour could not be explained by non-cultural factors. These findings indicated that culture seems to be more important for some problems (such as Withdrawn and Anxious/Depressed syndromes of YSR) but not in others (Aggressive Behaviour syndrome of YSR).

The conclusion that can be derived from studies such a Ho et al (1996), Murad et al. (2003) and Weisz et al (2006) is that such syndromes could very well be culturally determined variants of the symptoms of well-known mental health problems. Even though there are differences between mental health problems among adolescents from different countries, retrieving information from previous epidemiological studies, as well as from cross-cultural studies, could be very beneficial, as they could be assessed in order to generalize rates or explanations beyond a particular study (Costello et al., 2011).

2.2.2. Importance of Assessing A Clinical Sample

In order to narrow the gap between research and community-based adolescents' mental health, assessing a clinical sample is a priority. Despite the burden related to prevalence rates of adolescent mental health problems, mostly recounted by large numbers from community samples, a population neglected when it comes to assessing and identifying their psychopathology consists of patients attending mental health services. As argued by Costello et al. (2011), examining adolescents from a clinical sample is different from examining adolescents from the general population who may have a mental disorder but have neither sought nor been able to access treatment.

As clinical samples of adolescents diagnosed with mental health problems have come to be studied, a number of distinctive links between characteristics of psychopathology and specific risk factors have emerged. For example, Cole-Detke and Kobak (1996) illustrated that people with preoccupied attachment are prone to reporting elevated levels of depression, whereas people with dismissing attachment are more likely to report elevated levels of eating disorders (Cole-Detke & Kobak, 1996). Those with a negative view of self and a positive view of others (preoccupied attachment style) have a deep sense of unworthiness that causing them to seek excessive closeness, often leaving them vulnerable to emotional distress and depressive symptoms when their needs are not met (Elgin, 2006). In contrast, there is a direct correlation between neglect and rejection and eating disorder showing that dismissing attachment was causal in most cases, as most people with eating disorders were found to have rejecting or neglecting relationships in their lives (Barone, & Guiducci, 2002).

In support, Visser et al. (2003) argued that predictive factors of mental health problems (such as self, family and treatment-related factors) mainly influence adolescents' feelings, emotions and behaviours prior to diagnosis, but once the problem

exist, risk factors have little influence on the degree of change. This finding put light into the need of assessing clinical samples of adolescents, as it is important not only to identify risk factors but also to try and control them in a way that they will have less influence during intervention. Thus, assessing adolescents with mental health problems should be a challenge to mental healthcare professionals to increase their efforts to improve prevention, early identification, and treatment statistics.

The existing research on mental health problems among adolescents, either those seen in mental health units and primary care or those living in institutionalized childcare, has shown that this population demonstrates significantly higher rates of emotional and behavioural problems than do children from community settings (Brown & Wright; 2003; Kjelsberg & Nygren, 2004; McWey, Cui & Pazdera, 2010). Previous studies have indicated that as many as 80% of youths involved with child welfare agencies and mental health services have emotional or behavioural disorders, developmental delays, or other indications of needing mental health intervention (Farmer, Burns, Chapman, Phillips, Angold, & Costello, 2001; Landsverk, Garland, & Leslie, 2002).

A study conducted by Brown and Wright (2003) employed a clinical group of adolescents and compared it to a non-clinical group in order to investigate interpersonal differences and differences in the clinical symptomatology of their mental health problems. With the use of Youth-Self Report, they established significant differences between the comparison groups. Specifically, they found that the clinical sample of adolescents had significantly higher total scores on the Youth-Self Report, including significant differences on Externalizing and Internalizing problems. It was argued that these differences were associated firstly with interpersonal problems observed in clinical adolescents and secondly with clinical adolescents' lower levels of activity and sociability (Brown & Wright, 2003). These results further suggested that clinical

adolescents with mental health problems have several interpersonal problems (such as finding it hard to do things, arguing a lot, and caring) that impact their social skills and social lives; an association that found to have an effect in the diagnosis of mental health problems (Brown & Wright, 2003).

Such interpersonal problems also have a negative impact on their functioning and their emotional control, which, in turn, have an impact on their diagnostic conditions (Kjelsberg & Nygren, 2004). For example, Kjelsberg and Nygren (2004) argued that adolescents diagnosed with mental health problems are unable to control their stress, which puts them at greater risk of developing severe emotional and behavioural problems. This assumption was further supported by their findings in Norway that adolescents in the general population showed far lower rates of emotional and behavioural problems compared with adolescents from either psychiatric institutions or childcare institutions (Kjelsberg & Nygren, 2004).

2.2.3. Gender Differences in Adolescent Mental Health Problems

Numerous studies among adolescents have documented gender differences in rates of psychopathology (Cote, Vaillancourt, Barker, Nagin, & Tremblay, 2007; Friedrich, Mendez, & Mihalas, 2010). Researchers have turned to the examination of similarities and differences in the aetiology of mental health problems in boys and girls and this has yielded a complex picture in the prevalence, correlates and consequences of different forms of psychopathology in adolescence (Zahn-Wexler, Shirtcliff, & Marceau, 2008).

On the one hand, previous studies have shown that the proportion of adolescents with mental health problems is greater among boys than girls, with boys being three times more likely to experience mental health problems than girls (Hartung & Widiger,

1998; Meltzer, et a., 2000; Steinhausen, 2006). In a study by Steinhausen (2006), the results showed that there was a clear excess of mental health problems in boys compared to girls. This pattern was also supported by results from a study by Meltzer et al. (2000), which indicated that mental health problems were greater among boys (13%) compared with girls (10%). However, Meltzer et al. (2000) did not find any gender difference in emotional disorders.

On the other hand, a transnational study conducted by Haugland, Wold, Stevenson, Aaroe and Woynarowska (2001), assessing adolescents from Finland, Norway, Poland and Scotland, illustrated that girls reported more emotional and behavioural problems than boys, but it also found an increase in symptoms with age. Additionally, Kapi et al. (2007) compared self-reported emotional and behavioural problems among Greek and Finnish adolescents and also found that girls scored higher than boys on both Internalizing and Externalizing problems, with Finnish girls scoring higher then Finnish boys, Greek boys and Greek girls.

Investigations into Internalizing and Externalizing problems in adolescents are reflected in studies that have associated these with gender differences (Muris, Meesters, & Van Den Berg, 2003; Kenny, Dooley, & Fitzgerald, 2013). Specific types of mental health problems in adolescence often vary according to gender (Gutman, & Eccles, 2007). For example, boys outnumber girls in physical aggression and delinquency, but girls outnumber boys in Internalizing problems such as anxiety and depression (Burstein, Ginsburg, Petras & Ialongo, 2010; Canino, et al., 2004; Costello et al., 2011; Friedrich, Mendez, & Mihalas, 2010; Kapi, Veltsista, Sovio, Jarvellin & Bakoula, 2007; Pathak, et al., 2011; Rescorla, et al., 2007).

Since 1976, research has indicated that boys are more likely to respond with symptoms producing disturbances to their surrounding environments, whereas girls

react with symptoms more distressing to themselves than to others (Curman & Nylander, 1976). Specifically, girls tend to report more severe Internalizing problems, whereas boys tend to report greater Externalizing problems (Leve, Kim, & Pears, 2005; Lee & Stone, 2012). Several cross-cultural studies support this argument. For example, when Rescorla et al. (2007) compared gender differences in emotional and behavioural problems among adolescents aged six to 16 years old from 31 societies, they found that girls tended to score higher in Internalizing problems, such as anxiety and depression while boys tended to score higher on Externalizing problems, such as aggressive and delinquent behaviour.

Gender differences have also been documented in the expression of particular disorders (Crick & Zahn-Wexler, 2003). Although there is no extensive research on this, considerable evidence has shown a significant association of the role of gender in the manifestation of Internalizing and Externalizing problems throughout adolescence (Friedrich, et al., 2010). One example, of which the expression of disorder may differ between boys and girls, is depression. In a study by Bennett, Ambrosini, Kudes, Metz and Rabinovich (2005), the results revealed that although both boys and girls had a similar severity of symptomatology, boys had higher scores on depressed morning mood and anhedonia, while girls had higher scores on body image dissatisfaction, self-blame, feelings of failure, concentration problems and sleep problems. Explaining these gender differences, it can be argued that girls are more aware of and sensitive to their bodies and more willing to talk about experienced symptoms than boys (Kapi et al., 2007; Wool & Barsky, 1994). In addition, it may be also argued that behavioural role differences may also determine gender differences in a way that these influence the development of mental health problems in adolescents: boys may express aggressive behaviour as a health complaint and girls may express emotional instabilities as health

complaints (Haugland, et al., 2001). Cross-society consistency in gender differences in Internalizing versus Externalizing problems is a major finding, as it supports the long-lasting norm between gender and mental health problems.

2.2.4. Age Differences in Adolescent Mental Health Problems

Age differences have also been observed in several studies assessing adolescent mental health problems, with older adolescents usually present more disorders compared to younger adolescents (Burstein, Ginsburg, Petras & Ialongo, 2010; Canino, et al., 2004; Costello et al., 2011; Friedrich, Mendez, & Mihalas, 2010; Kapi, Veltsista, Sovio, Jarvellin & Bakoula, 2007; Pathak, et al., 2011). For example, Rescorla, et al. (2007) found that withdrawal and depression symptoms as well as social problems and attention-deficit/hyperactivity problems were found to increase with age (Rescorla, et al., 2007). In support, a study by Meltzer et al (2000) showed a significant difference regarding adolescents' emotional and behavioural problems between younger and older adolescents, with the older ones scoring higher; findings that have been replicated by a more recent study by Sandoval, Lemos and Vallejo (2006). Overall, emotional and behavioural problems were found to increase with age (Sandoval, et al., 2006).

Age differences were also observed for Internalizing and Externalizing problems (Bongers, Koot, Van der Ende, & Verhulst, 2003; Verhulst, Achenback, Van der Ende, Erol, Lambert, Leug, et al., 2003). In terms of the association between Internalizing problems and age mix results were obtained. On the one hand, previous epistemological studies have shown an increase of Internalizing problems with age in both boys and girls, (Bongers, Koot, Van der Ende, & Verhulst, 2003). On the other hand, however, Leve, Kim and Pears (2005) found that Internalizing problems increased over time only for girls (Leve, Kim, & Pears, 2005). Trying to explain age differences in adolescents'

Internalizing problems, Rescorla et al. (2007) argued that, in most societies, as young people grow up, they detach themselves from their parents, a process with which they may not be ready to proceed. As a result, a withdrawal from parents and the development of new attachment patterns with peers (considering the fact that they start to become increasingly engaged with their peers) make them feel unstable and vulnerable to anxiety and depression (Rescorla, et al., 2007). In addition, age differences regarding Internalizing problems were found to be associated with levels of worry (Barahmand, 2008). In some studies, lower levels of worry and a more constructive use of worry for problem-solving among older youths have been reported, indicating that younger adolescents worry more about the tasks that they face. Consequently, this fear produces stress that can cause anxiety and depression (Barahmand, 2008).

In terms of Externalizing problems, mixed results have also been observed. On the one hand, previous findings showed that they decreased significantly over time for both boys and girls aged 4 to 18 years (Verhulst, Achenback, Van der Ende, Erol, Lambert, Leug, et al., 2003). On the other hand, in a longitudinal study by Loeber and Farrington (1998), the results indicated that forms of antisocial and delinquent behaviour tend to emerge gradually until the age of 15. According to Loeber's model of antisocial development, high levels of arguing and disagreement in childhood would be expected to be followed by increasing levels of aggression, property violations, and status violations later on (Loeber, et al., 1993).

Robins (1966) followed up 402 children formerly referred to the St Louis child guidance clinic, after 30 years. Her study focused on antisocial behaviour. The results included the finding that childhood antisocial behaviour predicted adolescent and adult antisocial behaviour. At follow-up, 61% of participants in the antisocial group were still

seriously antisocial, while 27% had improved (antisocial behaviour was markedly reduced) and 12% had given up their antisocial behaviour. Remission and improvement were partly predicted by having close contact with siblings (increase), and an alcoholic father (decrease). Other predicting factors that Robins found were the kind of discipline in the home, the number of siblings, and a history of theft (Robins, 1966).

A review of the literature by Costello et al. (2011) showed that anxiety disorders, depression and substance use increase in adolescence, although attention-deficit hyperactivity disorder decreases during these years. In support, Canino et al. (2004) found higher rates of major depression, anxiety disorders and social phobia among older adolescents than among younger ones, and younger age was related to higher rates of attention-deficit hyperactivity disorder reduction during these years. The reason for the differences in the prevalence rates in Internalizing and Externalizing problems across age groups is unclear. One way to shed light on understanding this age difference could be by examining correlates of these problems separately by age group.

Previous studies have also shown that girls have higher rates of psychopathological symptoms with age compared to boys, which can be explained by puberty (Pathak et al., 2011). Puberty comprises major hormonal changes that are likely to contribute, for example, to both to depressive affect and aggression (Brooks-Gunn & Warren, 1989). Early puberty timing in girls is associated with an increase in mental health problems over the time (Kaltiala-Heino, Marttunen, Rantanen, & Rimpela, 2003). Girls are known to reach puberty an average of 2 years before boys, and therefore have more years of adjustment to their symptoms (Pathak et al., 2011). While the evidence showed that among girls, both Internalizing and Externalizing symptoms were more common the earlier puberty occurred, among boys, Externalizing symptoms alone were associated with early puberty (Kaltiala-Heino, et al., 2003).

Considering gender and age effects in clinically referred adolescents, Visser et al. (2003) examined predicting factors associated with psychopathology in youth referred to mental health services in the Netherlands. Even though boys had higher scores in emotional and behavioural problems compared to girls, they also showed greater improvement than girls after attending mental health services. They also observed that older adolescents had fewer mental health problems than younger participants (Visser, van der Ende, Koot & Verhulst, 2003). As they also found, both Internalizing and Externalizing problems decrease or remain stable with age with psychopathology presented earlier in life being more serious and psychopathology presented later in life having less influence on adolescents' development (Visser, et al., 2003).

Visser et al. (2003) indicated that several child, family and treatment factors were found to be predictive over and above earlier psychopathology. For example, Visser et al. (2003) found that higher Internalizing and Externalizing scores among both boys and girls over time were observed for children not born in the Netherlands and/or born to at least one non-Dutch parent, emphasizing the implication of ethnicity. Moreover, they also found that older children improved more on most Youth Self-Report scales than younger children, and longer follow-up intervals were associated with greater improvement on all these scales. These findings indicate that psychopathology presenting earlier in life is more serious, or that psychopathology presenting itself later in life has less influence on development and is therefore more accessible to improvement over time.

Risk factors in the development of mental health problems may differ across gender and age. For example, girls may personalize family conflict differently from boys and older adolescents may cope differently with stress from younger adolescents.

Thus, given extant research, it is important to consider gender and age when studying mental health problems in adolescents.

2.3. Risk factors of Adolescent Mental Health

Large segments of young people are growing up in circumstances of such limited assets and persistent adversity that their development and health are certain to be severely compromised. In such circumstances, there is a high risk of developing mental health problems, as they are vulnerable to several risks, such as psychological trauma, environmental stress and biological risk factors (Jessor, 1991). Therefore, adolescence is a key developmental stage in terms of mental health.

Examining factors that increase adolescents' risk of developing mental disorder has important clinical and theoretical implications. In addition, as mentioned in the previous sections, in order to interpret differences between mental health problems, questions about the causes of these problems need to be answered. Therefore, if this kind of information becomes available, new developmentally sensitive methods of prevention and treatments will be structured for greater effectiveness.

Good evidence exists in support of multifactorial causes of mental health problems in young people (Aggleton, Hurry & Warwick, 2000; Claveirole & Gaughan, 2011; Essau, 2006; Ford, et al. 2004). Previous studies have indicated that genetic factors, biological factors, psychological trauma, environmental stress, family, society and culture or a combination of these are involved in the development of mental health problems in adolescents (Burnett-Zeigler, et al., 2012; Fatori, et al., 2013; Fumagalli, Molteni, Racagni & Riva, 2007; Johnson & Wolke, 2013; Patel, Flisher, Hetrick, & McGorry, 2007; Peer, Rothmann, Penrod, Penn & Spaulding, 2004; Pilgrim & Roger, 2010; Rutter, 2000). In addition to these factors, there is also an individual variation in

terms of adolescents' personality, their academic ability and sexuality that cause problem behaviour (Aggleton, Hurry & Warwick, 2000; Burnett-Zeigler, et al., 2012; Patel, Flisher, Hetrick, & McGorry, 2007).

Exploring briefly several risk factors associated with adolescent mental health problems, studies support the notion that some mental health disorders, such as major depression and obsessive-compulsive disorder, have been linked to neurotransmitters (Hindmarch, 2002). In support, neurodevelopmental etiology can support the development of attention deficit/hyperactivity disorders (Walsh et al., 2008). In addition, twin-studies show that genetic factors play a role in the development of mental health problems; however, this was found to be associated with a complexity of interactions between genes and environmental events (Kas, Fernandes, Schalkwyk & Collier, 2007). For example, Walsh et al. (2008) studied the genetics of schizophrenics and found that children under the age of 18 who were diagnosed with schizophrenia were four times as likely to have duplicated or deleted one or more genes compared to those in the control group. Explaining the association of risk factors and the development of mental health problems, biological and genetic factors could also interact with environments such as the family environment and school to modify the risk of mental disorders. For example, poor family functioning may affect the time of puberty, which in turn, could contribute to child and parent conflict, relationships with deviant peers and low self- esteem (Richter, 2006).

Furthermore, psychosocial factors have also been reported to be risk factors in various types of psychopathology (Vijayakumar, John, Pirkis & Whiteford, 2005, as cited in Patel et al., 2007). Young people who experience psychological trauma such as any kind of abuse, violence, bullying and environmental stress were found to be vulnerable to a mental disorder (Patel et al., 2007). Negative life events have been

implicated in the development of mood, anxiety or depressive disorders while traumatic experiences can lead to post-traumatic stress disorder (Rutter, 2000).

Moreover, social stresses and strains coming from communities or cultures are associated with the development of psychopathological symptoms (Pilgrim & Roger, 2010). For example, poverty or living in rural areas, being a migrant and socioeconomic status are examples of stressors from communities that may put adolescents at a greater risk of developing mental health problems (Pilgrim, et al., 2010). As argued by Patel et al. (2007), these minority groups have a higher risk of developing mental health problems as they lack social support and control.

Even though there is a gradual shift towards independence in adolescence and a difference between factors associated with various disorders in different countries, a central and common component of behaviour in adolescent mental health problems is family. Family was found to be a risk factor for young people in communities as well as in those referred to services (Aggleton, Hurry & Warwick, 2000; Claveirole & Gaughan, 2011; Wenar & Kerig, 2005). Multiple aspects of family environment have been related to mental health problems in adolescence (Barber, 1992; Kenny, Dooley, & Fitzgerald, 2013; Lee & Bukowski, 2012) that will be discussed in the following Chapter (Chapter 3).

Different disorders have been found to be associated with different risk factors (Claveirole & Gaughan, 2011; Essau, 2006). For example, one of the risk factors found to be associated with anxiety and depression is anxiety or depression itself; the reason for making a young person anxious leads to more anxiety or even depression (Pearce, 2000). Additionally, suicidal behavior is associated with a negative perception of body image and lack of attention (Orbach 2006, as cited by Claveirole & Gaughan, 2011), whereas psychosis is influenced by drug misuse (Tucker, 2009, as cited by Claveirole &

Gaughan, 2011). However, this does not mean that causes associated with particular disorder are not associated with other disorders. For example, substance misuse or any stimulant drug may also increase the risk of developing suicidal behaviour, anxiety and antisocial behaviour (Bailey, 2000; Gaughan, 2011; Pearce, 2000).

Findings from previous epidemiological studies indicate that different risks factors are also associated with mental health problems in different countries. For example, in America, the factors found to impact mental health problems are gender, age witnessing physical violence, school disengagement and poor grades, peer deviance, using drugs and low parental monitoring and functioning (Burnett-Zeigler, et al., 2012; Kliewer & Murrelle, 2007). In Asia, the factors found to be related to the development of psychopathological symptoms are gender, family conflicts, socioeconomic status, parental education and impaired reading and vocabulary (Hackett, Hackett, Bhakta & Gowers, 2009). In Africa, the factors are academic ability, family structure, family conflict, poor family discipline and management, gender and community violence (Department of Health of South Africa, n.d.).

CHAPTER 3: THE IMPACT OF FAMILY (LITERATURE REVIEW)

3.1. Overview

Given the frequency of mental health problems in adolescence, an accumulative amount of research has been devoted to examine the factors that put adolescents at risk of developing mental health problems. Of all these risk factors (see Chapter 2, Section 2.3), family environment has been regarded as one of the most consistent factors linked to adolescent mental health (Barber, 1992, 1996; Bogels & Brenchman–Toussaint, 2006; Levin & Currie, 2010; Keijsers, Loeber, Branje, & Meeus, 2012; Kenny et al., 2013). During the past decades, the role of family factors in the development of mental health problems has received increased attention in research (Sander & McCarty, 2005). As an environment such as family is charged with the development of an adolescent's skills necessary for managing his/her life, parents and others can help young people to develop their sense of responsibility, independence and decision-making, which could then be used to pass this transition as smoothly as possible, preventing any risk of mental health problems (Russell & Bakken, 2002).

Previous research has indicated that the family predicts both positive and negative outcomes across a youth's lifespan (Claveirole & Gaughan, 2011; Ford, Goodman, & Meltzer, 2004). On the one hand, parental behaviour and actions, such as the provision of secure attachment, warmth, support, good communication and control, can be stated as protective factors against the development of maladaptive behaviour and psychological disorders in their offspring. On the other hand, families that struggle to provide attention, support and control to their children are at risk of producing mental

health problems in their children due to a lack of caring (Bogels & Brenchman – Toussaint, 2006). Risk factor research has shown different family characteristics to be related to an increase risk of developing emotional and behavioural problems (Allen, Moore, Kuperminc, & Bell, 1998; Demuth & Brown, 2004; Theobald & Farrington, 2012; Youngblade et al., 2007).

A number of researchers have explored the role of family factors in the development of adolescent emotional and behavioural problems including parent-child attachment (Pace & Zappulla, 2011), family functioning (Young, Galvan, Reidy, Pescosolido, Kim, Seymour & Dickstein, 2013), family communication (Levin & Currie, 2010) and parental styles and behaviours (Soenens & Beyers, 2012). In the present chapter, the relationship between adolescent mental health and these family environmental factors will be explored.

3.2 Attachment

An individual's attachment organization has been implicated in numerous aspects of functioning in childhood and adolescence (Kobak & Sceery, 1988; Allen, Hauser & Borman-Spurrell, 1996; Rosenstein & Holowitz. 1996). Attachment reflects the ways adolescents affect their family and social relationships. The implication of a construct of attachment for adolescents' wellbeing is gained from both theoretical intervention and evidence related to the association between attachment and psychological functioning (Allen & Hauser, 1996).

Attachment theory originates with Bowlby (1969, 1973b, 1980) who developed an aetiological perspective of human behaviour and argued that by attaching to the caregiver, the child is assured of safety, food and ultimately survival. Thus, the goal of

attachment is to maintain proximity to the caregiver, a goal that drives the child's behaviour around it. Adding to this, children need to feel attached to people in their lives in order to develop trust and a secure base from which they can explore and learn (Bowlby, 1969).

Several conceptualizations of attachment have been proposed. For example, an understanding of variations in attachment relationships has been demonstrated by Mary Ainsworth and her colleagues, by observing infants and their mothers in Uganda (Ainsworth, Blehan, Waters & Walls, 1978). Through their observations, they identified three types of attachment relationships: secure attachment, insecure- avoidant attachment and insecure-resistant attachment. They argued that the quality of caregiving relationships, whether warm or insensitive, influences the kind of attachment that they will develop. Similar conceptualizations of attachment styles have been also provided by other researchers (Hazan & Shaver, 1987; Main & Goldwyn, 1988), although in later research it was noted that some children were unclassified, thus another pattern has been added called insecure-disorganized attachment (Wenar & Kerig, 2005).

If parents are accessible, available or sensitive to their child's needs and respond with positive affect to these needs, the child is more likely to develop a secure attachment. In contrast, if the parents' behaviour is marked by distance or it is erratic, and they are irritable and angry during closeness, the child is more likely to develop either insecure-avoidant attachment (avoidance is the child's behaviour of keeping a low profile and displaying low emotional feelings in order to attempt to cope with the parent's need for distance) or insecure-resistant attachment (resistance is viewed as the child's attempt to capture the attention of the caregiver, while anger results from the frustration of inconsistent care) (Wenar & Kerig, 2005). In an insecure-disorganised

attachment, attachment appears to be represented by a collapse of any kind of systematic strategy in the face of an unpredictable and threatening environment (Lyons-Roth, Zeanah & Benoit, 1996, cited in Mash & Barkley, p. 457-491). If the parents use confusing cues or behave in a strange and frightening way, the child is likely to develop an insecure-disorganized attachment.

Characterizing children who are securely attached to their caregivers, a child demonstrates self-confidence and views him/herself as worthy of love and caring (Bowlby, 1973b). Such a child is more likely to develop self-reliance and help-seeking capacities as he/she matures (Armsden & Greenberg, 1987). In contrast, insecurely attached children were found to have low self-worth (Allen et al., 1998; Bogels & Benchman-Toussaint, 2006) and negative explanatory styles (Kobak & Sceery, 1988).

Several studies have examined the relationship between attachment and emotional and behavioural problems in children and adolescents (Borwn & Wright, 2003; Gallarin & Alonso-Arbiol, 2012; Gungor & Bornstein, 2010; Roelofs, et al., 2006). This research has shown that adolescents characterized by secure attachment to both parents and peers were more socially accepted compared to adolescents with insecure attachment, and they were also less likely to develop mental health problems such as anxiety and depression (Liable, Carlo & Rafaelli, 2000; Pathak, et al., 2011). In contrast, insecure attachment styles are found to be associated with the development of mental health problems in adolescents (Pace & Zappulla, 2011). In a study by Kobak, Sudler and Gamble (1991), insecurely attached adolescents were found to be the most depressed participants from within a sample of adolescents, all of whom were experiencing some levels of depression. This result was supported by Holmes (1993)

who illustrated that this population develops a feeling of abandonment and resentment, which then results in anxiety and maladaptive behaviour.

While secure attachment seems to protect young people from the onset of mental health disorders during adolescence (Leadbeater, Kuperminc, Blatt & Hertzog, 1999), insecurity seems to be linked to increased levels of psychopathology during adolescence (Roelofs, et al., 2006). In particular, adolescents with substance use disorders were found to have significantly lower perceived attachment to parents compared with adolescents without any mental health disorder (Essau, 2010). A similar finding was found with regard to aggressive behaviour in adolescence in that insecure attachment towards the father was predictive of adolescents' aggressiveness (Gallarin & Alonso-Arbiol, 2012). In addition, anxiety was found to be related to avoidance and negative warmth from parents and especially the father in Turkish and Belgian adolescents (Gungor & Bornstein, 2010). Finally, Ivarsson et al. (2010) examined the contribution of attachment in adolescents with and without obsessive-compulsive disorder (OCD) and depression and came to the conclusion that participants with OCD were classified as dismissing, whereas participants with depression were insecurely attached to their parents.

Combining together previous findings, it can be argued that insecure attachment is associated with both Internalizing and Externalizing problems during adolescence. This association was previously examined by a wide range of research (Eisenberg, Cumberland, Spinrad, Fabes, Shepard, Reiser, et al., 2001; Lee & Bukowski, 2012; Muris, et al., 2003; Pace & Zappulla, 2011). As mentioned in the previous chapter, Externalizing problems are related to a grouping of behavioural problems that are manifested in children's outward behaviour, associated with the bonding between the

child and the social environment and reflect the child negatively acting on the external environment (Eisenberg, Cumberland, Spinrad, Fabes, Shepard, Reiser, et al., 2001). From this perspective, Externalizing behaviour may be explained as a weakness in the attachment to a social group, including the family, of which a young person may be a part (Pace & Zappulla, 2011). Additionally, avoidant and anxious attachment styles were also found to predict Internalizing problems, highlighting that insecure attachment represents a predictive variable of difficulties in adolescence (Pace & Zappulla, 2011).

According to attachment theory, insecure attachment determines the type of psychopathology in the way children use their insecure strategies to either minimize or maximize the expression of their attachment needs (Muris, et al., 2003). A use of maximizing strategies would predispose to Internalizing disorders, as children may focus on their own distress and exhibit a need of parental love and support. Otherwise, the employment of minimizing strategies would lead to Externalizing problems, as children may refuse their distress and implement an aggressive attitude towards their parents (Dozier, Stovall & Albus, 1999). Extending this finding, young people with Internalizing problems will focus on negative feelings and cognitions, while individuals with Externalizing problems will embody some degree of alienation from caregivers (Duggal, Carlson, Sroufe, & Egeland, 2001).

Even though the link between attachment and mental health problems was associated with the way children interpreted their distress, there is also evidence that whether or not insecure attachment is linked to either Internalizing or Externalizing problems is also related with the way children perceive the parental approach (Waters, et al., 2000). According to Bowlby (1969) children need to feel attached to people in

their lives in order to develop trust and a secure base from which they can explore and learn. Based on these early attachment experiences with caregivers, they develop schemas about the self, the world and relationships – i.e. an "internal working model of the self" (Ainsworth, Blehan, Waters & Walls, 1978). This model reflects past experiences and guides expectations about attachment figures' responsiveness and accessibility as well as the personal deservingness of such care (Ainsworth 1989; Bowlby, 1973b, 1980). For example, if there are positive secure base experiences during adolescence, this can protect against future unsupportive and disappointing relationship experiences (Waters, Merrick, Treboux, Crowell & Albersheim, 2000). However, adolescents with an unhealthy internal working model can end up with negative core assumptions which they are unable to revise in the light of experience; therefore, this may have an negative influence on the quality of relationships that they develop with peers and family (Brotherton, Davies & McGillivray, 2010). In addition, unsupportive care can also result in thoughts that may guide problematic behaviour and complicated relationships (Waters et al., 2000).

The argument that the way adolescents perceive their attachment relationships with their parents, impacts on their wellbeing was also explored by a recent qualitative study which aimed to investigate the mechanisms behind this association. Bettman Olson-Morrison and Jasperson (2011) examined clinically referred adolescents, aged 14 to 17, and found that a lack of trust was the strongest theme reported by the adolescents. However, the majority of the adolescents mentioned rebelling against the boundaries set by parents. As they stated, lack of trust was a result of a very strict parental control; a parental behaviour that was interpreted as negative by adolescents, and was mentioned as the reason way adolescents experienced a negative relationship with their parents.

However, what happens to attachment as children grow up? Previous literature has indicated that there is continuity in attachment (Weinfeld, Sroufe, & Egelund, 2000). Waters Weinfield, and Hamilton (2000) assessed a middle-class sample and found that changes in attachment classification were associated with changes within the family environment and with the occurrence of negative life events; their results showed significant continuity over time. This point was also supported by Hamilton (2000) who found that negative life events moderate attachment, with a change occurring from secure to insecure attachment.

The issue of continuity of attachment over time addresses the emphasis of accessing stability and change when examining attachment. The first step towards process-level research on attachment, stability and change is the relation between negative life events and changes in attachment classification. Negative life events could affect attachment security in different ways with reference to consistency in caregiver behaviour. Firstly, working models are likely to change in response to changes in caregiver availability, accessibility and responsiveness (Waters et al., 2000). Over time, attachment representations might change in response to caregivers' behaviour changes. For example, parental fights, marital problems or family conflict may produce mood effects in parents, and that may interfere with their availability and responsiveness to their children (Waters et al., 2000). Secondly, these negative experiences may change the child's expectations of a caregiver's availability. This may happen, for example, if the parent becomes psychologically or chronically ill and the child assumes that he or she is less available (Waters et al., 2000). Another mechanism, that plays a role in attachment stability and change is the child's temperament (Wenar & Kerig 2005). For example, the child with a difficult temperament is negative and unpredictable which

hold back parents' ability to provide sensitive care. However, the child who expresses positive affect and interacts positively with parents' techniques and style is securely attached (Wenar & Kerig 2005). Therefore, attachment should not be seen only as a quality between parent and child but also as the product of transactions that change over time. While there is a relationship between attachment security and the sensitivity of caregiving, there is an influence of other variables such as caregivers' availability, family functioning and communication (De Wolf & Van IJzendoorn, 1997; Weinfeld, Sroufe, & Egelund, 2000).

To conclude, the previous literature provides strong evidence that attachment plays a role in the aetiology of psychopathology in youth. In this respect, research on adolescent mental health problems should include attachment as a predictive factor when examining risk factors in the development of mental health problems in youth.

3.3. Family Functioning

Current theory and practice emphasizes the linkage between family functioning and adolescents' well-being (Olson, 2000), as it is found to have an impact on an adolescent's behavioural and emotional development (Theobald & Farrington, 2012). A number of sources suggest that family functioning is implicated in a wide range of mental health problems in adolescents (Kwok & Shek; 2009; Tamplin, Goodyet & Herbet, 1998; Theobald & Farrington, 2012). In the report published in 1999 by the Social Survey Division of the Office for National Statistics in Great Britain, 19% of children living with their families were found to have unhealthy family functioning, and 35% of these children were found to have mental disorders (Meltzer, Gatward, Goodman & Ford, 2000).

In her book called "Normal Family Processes: Growing Diversity and Complexity", Walsh (2003) takes up the challenge of defining what is functional and dysfunctional within a family environment. She defines functional family as the family that carries out effectively its essential tasks such as providing adequate nutrition, support and protection and supporting the growth and well-being of its member, while a dysfunctional family is the family which is unable to deal effectively with the above tasks and is associated with signs of distress (Walsh, 2003). Her view of family functioning is based on the McMaster Model of Family Functioning (MMFF) (Guttman, Spector, Sigal, Epstein & Rakoff, 1972; Santa_Barbara, Woodward, Levis, Goodman, Streiner & Epstein, 1979). The model utilizes a general systems theory approach in an attempt to describe the structure, organization, and transactional patterns of the family unit (Epstein, Bishop & Levin, 1978). It refers to the family as an open system, which contains a group of individual units acting as one.

The important point of this approach is that it gives an explicit description of how a healthy functioning family can be. A healthy functioning family is defined as a family characterized by positive features of function (Walsh, 2003). According to MMFF (Epstein & Bishop, 1981, as cited in Walsh, 2003), the family is assessed on six dimensions – i.e. problem solving, communication, roles, affective responsiveness, affective involvement and behaviour control. When there is an ineffective functioning in any of these dimensions, family functioning can be stated as problematic or poor, while effective functioning in these dimensions can contribute to healthy functioning (Walsh, 2003).

In order to conceptualize these dimensions: (a) Problem solving is referred to as a family's ability to effectively resolve problems. These problems were categorised in

two areas: instrumental problems that are related to issues based in nature (e.g. provision of food, clothing and money) and affective problems, which are related to issues of emotions such as anger and depression. Epstein and Bishop (1981, cited in Walsh, 2003) argued that families with good functioning found ways to solve these problems, whereas poor functioning families struggled to solve them, and this may create distress in the family context; (b) Communication is defined as the exchange of verbal information within the family. In healthily functioning families, family members communicate in a clear and direct manner in both instrumental and affective areas (as mentioned in the first dimension), while in families with poor family functioning miscommunication occurs; (c) Role is defined as the repetitive patterns of behaviour by which family members fulfil functions. Five functions that are demonstrated as the basis of necessary roles in order to achieve effective functioning are: provision of resources, support and provision of comfort and warmth, developing skills for personal achievement (related to the physical, emotional, educational and social development of the child) and management of the family system based on decision making, boundaries between family members, caregiving and financial management; (d) Affective responsiveness is defined as the ability to respond to a given situation with an appropriate quality and quantity of feelings. Good family functioning is stated as giving the opportunity to its members to respond to the other members' feelings and express a full range of emotions, while in poor family functioning there might be rejection in feelings and emotions; (e) Affective involvement refers to the extent to which the family values the individual family member's interests and activities. In a healthy functioning family, each member considers and is involved in the interests of the other members. In contrast, in poor functioning family, members are not involved in each

other lives; (f) Behavioural Control is defined as the pattern the family adopts for handling behaviour in three areas: physically dangerous situations, situations that involve meeting and expressing psychobiological needs and situations involving interpersonal socializing behaviour within and outside family (Epstein & Bishop, 1981, as cited in Walsh, 2003).

Another way of approaching family functioning is by focusing on understanding of the family systemic perspective (Fiese, Wilder & Bickham, 2000). According to the family system perspective, family is conceptualized as a system, a dynamic as a whole, as well as a sum of subsystems. A subsystem can be classified as, for example, the parent-child relationship, or marital subsystem (parents' form) or even siblings' form (Minuchin, 1974). What allows these subsystems to function effectively within a family environment is a clear delineation of boundaries that will differentiate each subsystem, define the roles of each family member and will also allow them to meet their developmental needs. Conversely, a failure to maintain boundaries can cause distress and dysfunction in the family environment (Wenar & Kerig, 2005). For example, rigid boundaries maintain strict roles between family members and foster separation between the parent and the child. Such a situation could also cause barriers in communication and then produce serious problems in emotional support. Individuals may feel lonely and unsupported in rigid families. At the other extreme, another boundary is enmeshment where there is no differentiation between family members. In such a situation, children may enjoy feelings of belonging although in extreme enmeshment, children may interfere with freedom and autonomy (Minuchin, 1974).

In addition to MMFF approach and family system perspective, a series of research conducted by Olso introduced another two dimensions of family functioning:

rigid and enmeshment were also considered as family functioning categories. In 1983, Olso, Russel and Sprenkle identified elements of family functioning as cohesion and flexibility (where rigid is the extreme low of flexibility and enmeshment is the extreme high of cohesion). Family cohesion is defined as the emotional bonding that family members have towards each other (Olso & Gorall, 2003) and is focused on how systems balance separateness against togetherness (Olso & Gorall, 2003). Flexibility is defined by Olso (Olso & Gorall, 2003) as the amount of change in a family's leadership, relationship rules and role relationships. Since then, numerous studies have used these dimensions in order to assess the family structure and family functioning, especially when investigating the impact of family on child and adolescent emotional and behavioural problems (Bloom, 1985; Peleg-Popko & Dar, 2001; Youngblade et al., 2007). As found in a qualitative study conducted by Henry, Robinson, Neal & Huey (2006), adolescents who interpreted their families as well-functioning and balanced reported their parents to be more supportive compared to adolescents who reported their families as unbalanced and their parents as inflexible. This finding is consistent with the above literature that argued that the overall family system and functioning is related to adolescent wellbeing.

There is a large body of research which argued that family functioning affect adolescent mental health problems. For example, low or high cohesion, in combination with extremes in adaptability, are associated with child anxiety. Peleg-Popko and Dar (2001) argued that higher family cohesion was associated with child social anxiety, whereas a fear of strangers was associated with a lack of family adaptability. Additionally, in a longitudinal study on the impact of family dysfunction on child anxiety, Nomura et al. (2002) found that a lack of cohesion increased the risk of child-

depressive disorders. Moreover, in 2004, Katz and Low showed that child anxiety and depression, as well as child aggression, was associated with fragmented family conflict and family interaction – consisting of disengagement and depression, factors that occur within poorly functioning families.

Furthermore, there is also an association between family dysfunction and depressive disorders in adolescents. Tamplin et al (1998) compared family functioning in families of adolescents with major depressive disorders and aggressive behaviour and a community control sample. The clinical sample was found to be associated with poor family functioning. Poor family functioning was based on a mother's poor mental health, whereas a father's mental health had no association with family functioning. In another study, Tamplin and Goodyer (2001) examined the families of two subgroups of adolescents in the community; high and low risk of major depressive disorder. Their results showed significant differences in family functioning between high- and low-risk groups. These results were different between mothers' and fathers' reports; mothers reported differences related to roles in the family environment while problem-solving, affective responsiveness and behaviour control were reported by fathers. It was argued that adolescents at high risk of major depressive disorders had poorer family functioning than adolescents at low risk of major depressive disorders. This is because a dysfunctional family environment may undermine the child's self-esteem, which, in turn, contributes to a feeling of failure that may cause depression (Lizardi, Klein, Ouimette, Riso, Andreson & Donaldson, 1995).

Work in this area also discovered that certain other mental health disorders, such as schizophrenia, eating disorders, conduct disorders and antisocial behavior were also associated with family dysfunction (Fendrich, Warner & Weissman, 1990; Kwok &

Shek, 2009; Theobald & Farrington, 2012). For example, Chinese adolescents with suicidal ideation were negatively associated with family functioning (Kwok & Shek, 2009). Since families in Hong Kong provide emotional support for most adolescents, where parental concern, mutuality and engagement are valued by adolescents, family functioning may contribute to a decrease in adolescent suicidal ideation (Kwok & Shek, 2009). In a study by Theobald and Farrington (2012) dysfunctional families were found to predict behavioural problems and antisocial behaviour in boys.

As argued by numerous authors, adolescent mental health problems were found to have a negative impact on parenting, which in turn lead to family dysfunctional environment (Patterson & Capaldi, 1991). For example, this might happen because of parental struggle to cope with adolescents' mental health problems and sometimes they feel they need to "give-up" or withdraw from attempts to control their children's problematic behavior. This parental style reinforces the children's' negative behavior which turns into a vicious cycle (Patterson & Capaldi, 1991). In addition, adolescence is a stressful period, especially in an enmeshed family, which is unable to cope with the developmental task of separation, and as a result the young person senses stress and may respond with troubling behaviour such as self-starvation, which in turn may cause eating disorders (Rowa, Kerig & Geller, 2001).

Given the move towards family functioning in relation to adolescent mental health problems, it is also essential to focus on family satisfaction as well. Previous literature has indicated that adolescents who report being satisfied with their experiences of parent-child relationships and the way their families function are found to be at a decreased risk of developing emotional and behavioural problems (Kenny, Dooley, & Fitzerald, 2013; Weiss, Goebel, Page, Wilson, & Warda, 1999). The results

of the study by Kenny and colleagues (2013) revealed that adolescents with high levels of satisfaction in their interpersonal relationships and family functioning were at no risk of mental health problems compared to those who reported low levels of satisfaction. In contrast, high levels of criticism and exclusion were found to predict high levels of distress. This occurred because levels of satisfaction predicted levels of emotional distress, a risk factor that is associated with emotional and behaviour problems in this population (Garnefski & Diekstra, 1996). In addition, dissatisfaction within a family environment predicts the degree of emotional and behavioural problems in children as it is related to negative interactions, negative affects and less responsiveness (Weiss, Goebel, Page, Wilson, & Warda, 1999) and it also gives an indication of the severity of maladjustment (Garnefski & Diekstra, 1996). This negative atmosphere has, in turn, been related to young people's development of less compliance with family wishes and more defiant behaviour (Cummings, Pellegrine, Notarius, & Cummings, 1989).

In conclusion, studies which have examined the role of the dimensions of family functioning and children's and adolescents' psychopathology, have found that positive family functioning can be a protective factor for young people's well-being (Epstein & Bishop, 1981, as cited in Walsh, 2003), whereas negative family functioning is found to be associated with anxiety (Peleg-Popko & Dar, 2001), depression (Tamplin and Goodyer, 2001), aggressive behaviour (Talwar, 1998), schizophrenia (Kwok & Shek, 2009), antisocial behaviour (Theobald & Farrington, 2012) and eating disorders (Rowa, Kerig & Geller, 2001). With reference to previous research into family functioning, results from the above studies indicate that family functioning, particularly cohesion, flexibility, and satisfaction, are related to adolescent mental health problems. It is thus important to enhance these dimensions of functioning in this project, as it is aims to

explore the impact of family functioning on adolescents' emotional and behavioural problems.

3.4. Family Communication and Relationships

"Once a human being has arrived on this earth, communicating is the largest single factor determining what kinds of relationships a person makes with others and what happens to the child in the world about"

- Virginia Satir (n.d.)

Defining communication, Berlo (1960) stated that it is the process of exchanging information and feelings. It helps to express our opinions, share our assumptions, and inquire into the other person's mode of thinking, therefore, communication skills are essential in resolving conflict and problems, and increasing understanding of others (Berlo, 1960). Considering this definition, family communication can be a crucial component within the family environment, as the way family members communicate with each other can state whether or not people feel happy and satisfied within that environment. Thames and Thomason (1998) defined family communication, as something more than just the exchange of words between family members, it is also components like facial expressions, body language, tone of speech and posture. Adding to this definition of family communication, Fitzpatrick and Ritchie (1993) explained family communication as a process of intersubjectivity and interactivity. Intersubjectivity refers to the distribution of cognitions among participants in a communicative occurrence, whereas interactivity refers to the degree to which symbol creation and interpretation are related (Fitzpatrick & Ritchie, 1993). Because

communication is a process that takes place simultaneously within a social unit and between cognitive units, an adequate theoretical account of family communication must account for both intersubjectivity and interactivity.

Viewing parenting as a process that guides adolescents, parent-child communication has been found to lessen the impact of mental health problems in youth (Erel & Burman, 1995). Maenle and Herringshaw (2007) argued that family communication could be used to build self-confidence and develop positive relationships in youths' lives. They stated that this could be achieved when parents attempt to approach children in a welcoming way by developing conversations about their children's interests, activities and feelings, by giving full attention to these conversations. These actions will help them understand their children's actions and avoid any misunderstanding and conflicts between the parent and the child (Maenle & Herringshaw, 2007). Hence, it is important for family members to find ways to communicate in order to cope effectively with their children's behaviour and prevent any impairment in the child's development (Maenle & Herringshaw, 2007).

Another component of communication, which has been found to be act as a protective factor against children's and adolescents' mental health problems, is active listening. Hearing and being heard in the family unit is vital as it provides understanding about a person's experiences, feelings and point of view. Being a good listener has been found to encourage children to express their negative feelings (Maenle & Herringshaw, 2007), an important factor against the development of distress in children and adolescents (Resnick, Harris, & Blum, 1993).

Another family communication component that has been found to be a protective factor against the development of adolescent psychopathology is that of

family rituals and routines (Baxter, & Clark, 1996; Elgar, Craig, & Trites, 2013; Gebek & Bushaw, 1991; Kiser, Bennett, Heston, & Paavola, 2005). For example, Gebeke and Bushaw (1991) suggested family meetings as one way of developing positive family communication that families can benefit from, as it is a good way of practicing problem-solving skills, promoting communication and building family unity. Also, children are able to see their family working together as a group, an experience that make them feel part of the family and helps them to be secure (Gebeke & Bushaw, 1991). They explained that in order for the meeting to be effective, family members need to have the opportunity to express their feelings and ideas, either positive or negative, to encourage everyone to bring up issues, to involve everyone in an age-appropriate way with no one person taking control over meetings and to function democratically (Gebeke & Bushaw, 1991). In addition to family meetings, family dinners were also found to play a similar role in the way the family communicates as family meetings (Elgar, et al., 2013).

Despite the positive impact of family communication on adolescents' wellbeing, there is a body of literature showing that family communication could act as a risk factor in the development of mental health problems in adolescents (Bogels & Brenchman-Toussaint, 2006; Demuth & Brown, 2004; Taylor, Repetti & Seeman, 1997; Wenar & Kerig, 2005). A cumulative number of studies have shown dysfunctional parent-child communication to be associated with youths' emotional wellbeing and life satisfaction. However, the impact of family communication on adolescents' mental health problems has been found to also depend on the gender both of the parent and the child (Levin & Currie, 2010).

In a recent study by Levin and Currie (2010), where the relation between mother-child communication, father-child communication and life satisfaction was examined, results showed that there was a significant gender difference in ease of communication with the father. Specifically, they indicated that girls were more likely to have greater difficulty in communicating with their father than their mother, as they found it difficult to communicate about things that bother them, while boys have difficulties with both parents. For both boys and girls, these findings can be interpreted as unsupportive behaviour that may cause social and emotional impairment in adolescents (Levin & Currie, 2010),

In addition, a lack of communication has been shown to be significantly associated with depression (Monck, Grahan, & Richman, 1994). Girls who could not approach their mother and talk with them were shown to be at risk of developing depression (Monck, et al., 1994). This finding was also supported by Fanti et al. (2008) who demonstrated that a lack of communication with mothers was associated with Internalizing problems over time. Nevertheless, previous studies have confirmed that communication impacts the onset of schizophrenia in adolescents (Miklowitz, 1994). For example, Goldstein (1990) examined families with mild to moderately disturbed adolescents and revealed that the incidence of schizophrenia was higher among families with high communication deviance compared to families with low communication deviance. This suggests that for vulnerable adolescents, unclear or a lack of communication presages the appearance of schizophrenia (Wenar & Kerig, 2005). Difficulty in communicating with parents was found to increase the rates of anxiety in children as well, as the lack of family discussion can significantly increase anxious feelings in children (Bogels & Brechman – Toussaint, 2006).

Furthermore, there is evidence that difficulties in parent-child communication are also associated with delinquent behaviour. Nye (1958) argued that the intimacy of communication between parent and child is one of the most important family factors in controlling delinquency. Based on Nye's (1958) social control theory, parents influence their children through the direct control of behaviour, through restriction, supervision and punishment; internalised control through the creation of a child's conscience and indirect control through the amount of affectional identification the child has with parents. This view was also supported by Demuth and Brown (2004) who argued that parental absence and less involvement in a child's life undermines direct and indirect controls, which, in turn, produces bad communication and results in high levels of delinquency among adolescents.

As seen above, family rituals play a crucial role in family communication (Kiser, et al., 2005). However, the absence of family routines, meetings or dinners is found to be associated with emotional and behavioural problems in adolescents (Elgar, et al., 2013). For example, low frequency of family dinners was negatively related to both Internalizing and Externalizing problems in Canadian adolescents (Elgar, et al, 2013). This association is partially attributable to the ease of communication between parents and adolescents. As found in previous research, family dinners gives the child the chance to share emotions and coping strategies that will help him/her deal with any emotional and behavioural problem that he/she may experience (Fiese & Shwartz, 2008). In a survey by the US National Center of Addiction and Substance Abuse, results indicated that adolescents who had five to seven family dinners per week were four time less likely to use alcohol, tobacco or marijuana that those who had zero to two family dinners per week (National Center of Addiction and Substance Abuse, 2007). Thus, it

can be argued that family rituals such as dinners, perceived as way of communication between parent and child, are linked with risky behaviour.

In analysing family communication, it is very important to understand the relationships between the child and the parent (Collins & Russell, 1991). Collins and Russell (1991) proposed three components of parent-child relationships that provide a useful framework in the literature of parent-child relationships and adolescent well-being. Firstly, they argued that mother-child relationships are characterized by everyday interactions, such as involvement in care giving, while father-child relationships are characterized by entertainment activities such as play. In a study by Montemayor (1982), the participants reported that they spent much more time alone with their mother than alone with their father. Fathers' interactions with their children are found to be characterized by less shared time and more entertaining involvement. In addition, in interview studies, both daughters and sons mentioned that their father's interactions were characterized by giving advice, and were found to involve more facilitative communication than mother-child exchanges (Hunter, 1985; Youniss & Smollar, 1985).

In a review written by Bogels and Phares (2008), the authors came to the conclusion that fathers play an important role in the development of anxiety disorders in children. They stated that if fathers have a limited involvement in their children's lives and they fail to encourage the autonomy of the child, they put the child at risk of developing anxiety symptoms. As they pointed out, this may occur due to the fact that children count more on their father's responses than on their mother's responses in the face of possible threat, in order to decide whether the situation is dangerous and should be avoided, which is related to the development of subsequent anxiety or an anxiety disorder. While it is well known that relationships with a mother are particularly

important in the development of adolescents (Levin & Currie, 2010), psychological literature on how the father and child relationship may be related to children's psychopathology has grown substantially in the last decades. Flouri (2010) stated that the quality of parent and child interactions is associated with emotional and behavioural problems in young people.

Secondly, the degree of positive or negative affect experiences on parent-child interactions is an indicator of the quality of their relationship and communication (Alexander, 1973). In observational studies, findings illustrated that children displayed positive affect towards both mother and father with some differences in frequency and content of the interactions. Bronstei's (1984) study of Mexican families showed that father-child interaction was warmer and involved more encouragement and agreement than mother-child interaction. However, mothers received a more negative approach in negotiations with their adolescents than fathers (Cowan, Drinkard & MacGavin, 1984). In addition, relationships with mothers are marked by greater feelings of closeness in adolescents than relationships with fathers (Collins & Russell, 1991).

Moreover, it is very important to take into account the emotional state of both parents and children when talking about the effect of these relationships. A number of previous findings indicate a negative correlation between parenthood and adolescents' psychopathology when there is a high level of stress, especially in mothers (Savin-Williams & Small, 1986). This association was found to be associated with misunderstanding in parent-child communication. Mothers and fathers who reported experiencing high levels of stress displayed difficulty in understanding their children's needs and perceptions (Silverberg & Steinberd, 1987).

A final dimension of parent-child relationships is the concomitant impact of cognitive and social changes during adolescence (Collins & Russell, 1991). From a small number of cross-sectional comparative studies, findings suggested that fathers might lag behind mothers in becoming aware of adolescents' changes and self-views, something that makes communication more difficult (Hinde, 1979; Allesandri & Wozniak, 1987). However, mothers' perceptions of adolescents meet with adolescents' self-beliefs at a higher level than those of fathers (Paikoff & Collins, 1989).

Another component of adolescent – parent relationship that has been found to impact adolescents' mental health is parental monitoring. Poor monitoring (i.e., lack of knowledge) is associated with adolescents' involvement with antisocial and delinquent peers (Hirschi, 1969; Patterson & Dishion, 1985; Patterson, Reid, & Dishion 1992), resulting in themselves involving in similar behavior. Findings consistent with this formulation have shown that the association between parental monitoring and adolescents' mental health problems is bidirectional (Kandel, & Wu, 1995; Laird, Pettit, Bates, & Dodge, 2003). As they found, on the one hand, adolescents whose parents are able to monitor their behavior and have knowledge about their activities, have fewer opportunities to engage in delinquent behavior (Paternoster, 1988). On the other hand, increases in delinquent behaviors predict decreases in knowledge, and thus impact parental monitoring (Laird, et al., 2003).

Additionally, a series of studies by Paul Frick, assessing the association between the lack of parental supervision/monitoring and delinquency behaviour in children and adolescents showed that parents' monitoring and supervision predict behavioural problems in youth (Frick, Christian, & Wooton, 1999). As he argued, this can occur when parents are involved in their children's activities and use positive discipline

strategies in communication, such as use of compliments for good behaviour. However, when parents show less involvement with their adolescents, possibly because of the adolescents' need for independence, the maintenance of some level of positive involvement may be important for reducing the risk for conduct problems (Frick, et al., 1999). This finding is consistent with the argument made by social control theorists that parent and adolescent attachment enriches the internalization of the parents' prosocial values and makes the adolescent less vulnerable to antisocial influences (LaGrange & White, 1985). This association was also supported by Patterson and his colleagues (Reid, Patterson, & Synder, 2002) who referred to a lack of monitoring as a failure to deliver supervision and to stay knowledgeable about children's social lives, characteristics that they found to be predictors of involvement in delinquency and antisocial behaviour as predictors of developing conduct disorders.

As mentioned above, a lack of communication can cause conflict among family members (Maenle & Herringshaw, 2007). There is evidence showing that conflict acts as a risk factor in the development of depressive symptoms in adolescents (Kaslow, Deering, & Racusia, 1994; Taylor, Repetti & Seeman, 1997). More depressed children were found within families, characterized by high levels of conflict, like marital conflicts (Kaslow et al., 1994). Low levels of behavioural and emotional involvement and high levels of conflict are among the characteristics of parent-child relationships that are associated with depression in children (Taylor, Repetti & Seeman, 1997). Marital conflict has also been found to cause family life to be emotionally unpleasant and a threat to a child's emotional and physical well-being, as well as behavioural problems such as aggression, hyperactivity and anxiety in children of divorced parents (Amato & Keith 1991; Block, Block & Gjerde, 1986; Cummings & Davies, 1994a).

In order to find out how parental conflict contributes negatively to children's psychopathology, Emery (1989) suggested four processes: first, children adopt ineffective conflict resolution styles such as withdrawal or anxiety; second, parents take inconsistent disciplinary action that may lead to anxiety; third, parental conflict disrupts their bonds with their children; fourth, parental conflict serves as a general stressor to a child's environment, threatening the child's sense of security. However, it is worth mentioning that children mental health problems can also cause or exacerbate marital problems when the conflict occurring is child-related and subsequently the child may respond with fear (Frey & Oppenheimer, 1990; Gable, Belsky & Crnic, 1992). Adding to this, Siqueland, Kendall and Steinberg (1996) argued that the marital quality of parents was poorer among children diagnosed with anxiety disorder compared with a normal control group.

Considering the literature in family communication and adolescent-parent relationship, it is clear that the way parents communicate with their children plays a crucial role in the development of mental health problems in adolescents. The protective impact of good parent-child relationship as a result of good family communication is likely to be especially great for adolescents with mental health problems. As already reported, mother and father play different roles in the development of young people, especially during adolescence, a period with physical, behavioural and social changes. Consequently, this suggests that family communication may provide a useful vehicle for advancing research between family and adolescent psychopathology.

3.5. Parental Style and Behaviour

Parental style and behaviour are also thought to play a role in the pathogenesis of emotional and behavioural problems in adolescents (Muris, et al., 2003). The way parents behave, as well as the way adolescents perceive this style and behaviour is an important factor in the aetiology of mental health problems in this age group (Henry, et al., 2006). For example, there is evidence to support the idea that parental rejection and lack of warmth creates risks for both Internalizing (Soenens & Beyers, 2012) and Externalizing problems (Roelofs, et al., 2006), while parental over-control creates risks for anxiety in youth (Bogels, & Brechman-Toussaing, 2006). Consequently, research on parental style and behaviour has been central to research examining parenting in adolescent psychopathology, as parental behaviour contributes to adolescents' later behaviour and psychopathology (Wargo, 2007).

Diana Baumrind (1967), a psychologist, found what she considered to be the four basic fundamentals that could help form successful parenting: responsiveness vs. unresponsiveness and demanding vs. undemanding. From these factors, she identified three parental styles, which she based them on parental behaviour such as parental control (how parents manage their children's behaviour) and parental warmth (parental acceptance of their children's behaviour, as opposed to being rejecting and unresponsive). The first parental style is 'authoritative'. Such parents tend to be warm but firm by encouraging their children to be independent. They are characterized by discussing, listening to and taking into account their children's points of view. The second style is 'authoritarian', which refers to little warmth and a high degree of control by parents. These parents are described as strict and they believe that their children should accept, without question, the rules and practices that they establish. The third

style is ‘permissive’. These parents are very warm and understanding. They do not like to say no to their children and they are indulgent and passive in their parenting. Adding to her work, Maccoby and Martin (1983) expanded the styles to four by adding ‘uninvolved’ as a parental style. Uninvolved parents are characterized by a lack of warmth; they are sometimes uninvolved to the point of being neglectful and they do not place any demands on their children during adolescence.

There is evidence suggesting that adolescent behaviour and characteristics are linked to different parental styles (Collins, et al., 2000; Kopko, 2007; Steinberg, 2001; Wargo, 2007). For example, adolescents with authoritative parents are characterized as learning how to negotiate and engage in discussions as well as being more likely to be socially competent, responsible and autonomous (Kopko, 2007). Adolescents with authoritarian parents are characterized by dependency. They do not usually engage in discussions and they know that they must follow parental rules. They are at a higher risk of developing aggressive behaviour (Steinberg, 2001). Adolescents with permissive parents make their own decisions without any parental input. Thus, they learn that there are few boundaries and rules and this may contribute to problems of self-control (Kopko, 2007). Adolescents with uninvolved parents experience poor parenting with little involvement and, as a result, they demonstrate impulsive behaviour and develop issues of self-regulation (Kopko, 2007).

Although these elements of adolescent behaviour are constant across different parental styles, there is an important dimension that needs to be assessed when considering parenting in adolescence: the extent to which parents encourage their children to become more independent and to develop their own opinions and beliefs. From the research of Steinberg (2001) on the impact of parental style and behaviour on

adolescent development and mental health, it emerged that coming from an authoritative parental style, where adolescents learn to be more independent and stand more on their own views, works against the development of mental health problems, as adolescents raised by authoritative parents showed more advantages in their psychosocial development and mental health compared with their non-authoritatively raised peers (Gray & Steinberg, 1999). They were found to have better school achievements, higher scores in self-esteem and self-reliance, lower scores in depression and anxiety, as well as being less likely to engage in antisocial behaviour (Gray & Steinberg, 1999). In support, similar findings have been replicated by Adamczyk-Robinette, Fletcher and Wright (2002) who examined parenting styles as they relate to adolescent alcohol and tobacco use. Higher levels of authoritative parenting were associated with lower levels of tobacco use and alcohol among adolescents. This was explained by the fact that adolescents benefit, both behaviourally and psychologically, from parenting that is high in warmth, behavioural control and the granting of psychological autonomy (Steinberg, 2001).

The results of the above studies suggest that authoritative parenting seems to act as a protective factor against mental disorders in children and adolescents. Allen, Boykin and Bell (2000) argued that this might occur because parental involvement makes the child more receptive to parental influence, enabling effective socialization and helping in the development of self-regulation skills. Finally, they also argued that teaching the child to communicate through the verbal give-and-take characteristics of dialogue is the process that fosters their cognitive and social competence, thus enabling the child to function outside the family (Allen, Boykin & Bell, 2000).

Considering Baumrind's (1991) theory of parenting styles, Gottfredson and Hirschi (1990) emphasized the importance of parenting styles in the development of self-control. Parents, they argued, must foster self-control in their children by (a) monitoring their children's behaviour, (b) identifying deviant behaviour and (c) correcting it when it occurs. Underlying these components, they concluded that parents who care for and discipline their children would tend to watch and correct such behaviour. Thus, the stronger the parent-child bond, the more likely this will happen (Hirschi, 1995; Wilson & Petersilia, 2011). This assumption was supported by Phythian, Keane and Krull (2008) who found that effective parenting styles and behaviour has a significant and positive impact on children's self-control while ineffective parenting styles and behaviour were found to be negatively correlated with children's self-esteem. Effective parental styles were stated as nurturance, monitoring and supervision, whereas ineffective parenting was measured by rejection. Consequently, a nurturing, non-rejecting family environment is positively associated with children's self-control (Phythian, Keane, & Krull, 2008).

As seen above, on the one hand, parental styles act protectively in the development of adolescents. However, on the other hand, maladaptive parenting has long been viewed as an important determinant of adolescent psychopathology (Johnson, Cohen, Kaser, Smailes, & Brook, 2001; Youngblade, et al., 2007). Clausen (1996) found that parental styles with low levels of warmth, care and protection, such as authoritarian and uninvolved parenting styles, were associated with high levels of alcohol and tobacco use. In addition, a positive relationship between the lack of parental warmth and involvement and adolescent depression has also been reported by O'Byrne, Haddock and Poston (2002). This has also been supported by McPherson (2004) who

examined the relationship between parental styles and behaviour and adolescent depression, alcohol use, tobacco use and academic performance. The association between parental punishment and lack of warmth and adolescent psychological symptoms have also been reported in other cultures such as in Pakistan (Punamaki, Qouta, & El-Sarraji, 1997).

In addition to the association of parental styles and adolescent psychopathology, the development of mental health problems has also been found to be associated with parental behaviour (Johnson, et al., 2001; Levin, & Currie, 2010; Soenens & Beyers, 2012). Firstly, maladaptive parental behaviour, such as loud arguments between parents, difficulty controlling a child's anger, the use of guilt to control the child, and supervision have all been associated with the risk of developing psychiatric disorders such as anxiety, depression, personality as well as substance use disorders (Johnson, et al., 2001). Secondly, unsupportive behaviour from parents was found to be another factor that put child at risk of developing mental health problems (Levin & Currie, 2010). Specifically, Levin and Currie (2010) found that unsupportive parenting was associated with emotional problems in adolescents. As argued by Windle (1992), this could be because support from the family was shown to moderate the relationship between stressful life events and problems behaviour.

Thirdly, it is not only unsupportive behaviour that impacts mental health problems in adolescents (Levin & Currie, 2010) but also autonomy-support (Manzi, Regalia, Pelucchi, & Fincham, 2012). Manzi and colleagues (2012) argued that autonomy-support could manifest itself in different domains of adolescents' lives including their mental health. In a sample from the USA, Belgium, Italy and China, they found that depressive symptoms were negatively related to parental autonomy-support,

especially in the dimensions of thinking and decision-making that were reinforced by this type of parental behaviour. Adolescents who perceive their parents as controlling are likely to experience feelings of pressure, incompetence, helplessness and alienation (Soenens & Beyers, 2012). From this perspective, it can be argued that this type of parenting undermines the satisfaction of needs in adolescents, important needs that have been shown to be related to their adaptive behaviour (Deci & Ryan, 2000).

Moreover, as debated by Repetti, Taylor and Seeman (2002), parental behaviour such as anger, aggression, lack of warmth and support and neglect of the needs of their offspring could increase the child's risk of developing mental health problems in four ways. Firstly, neglect and abuse produce immediate threats to children's lives; secondly, threatening and stressful circumstances within a family environment create dysregulation in the child that may contribute to the development of a mental health problem; thirdly, such characteristics in a family may be a reason for parents to fail to foster self-regulatory skills in their children, thus, the child is unable to deal with emotionally engaging interpersonal situations; fourthly, problematic parental behaviour – i.e. a lack of monitoring and supervision – increases the likelihood of behavioural problems and substance use in children and adolescents.

Fourthly, numerous investigators, across a wide array of literature on parenting, explore two dimensions of parental behaviour – rejection and control – which are related to youth dysfunction, including depression and other Internalizing problems (Chorpita, 2001, as cited in Magaro & Weisz, 2006; Muris, Meesters & Van Den Berg, 2003). Considering what is meant by rejection and control, rejection is defined as a type of parental behaviour associated with unresponsiveness to and disapproval of the child (Clark & Ladd, 2000), while control is defined as a type of behaviour involving

excessive instruction in the child's activities and routines, unnecessary encouragement of the child's dependence on parents and parental influence on how the child should think or feel (Barber, 1996). A study that support these two dimensions in relation to adolescent psychopathology was carried out by Muris et al. (2003) who found that rejection by parents was positively associated with both Internalizing and Externalizing problems in adolescents. Low levels of warmth in association with rejection and overprotection were accompanied by high levels of psychopathological symptoms, showing that family factors are antecedents of psychopathology in youth (Muris, et al., 2003). In addition, Rapee (1997) found that perceived parental rejection had a significant relationship with depression in both a clinical and non-clinical sample, with parental rejection being more influential than parental control in adolescent mental health problems. These findings were replicated by Armstrong and Boothroyd (2008) who argued that the experience of a lack of parental control in adolescent daughters aged 13 to 17 acted as a risk factor in the development of mental health problems.

Exposure to rejection and/or control implicates cognitive factors such as threat appraisal, which probably mediate the development of mental health problems (Bogels & Brechman-Toussaint, 2006). As stated by Hudson and Rapee (2001), oppositional and anxious children interpreted vague situations, caused by control, as threatening, with anxious children giving avoidant responses, whereas oppositional children gave aggressive responses. This difference between the two groups of mentally ill children could indicate that the way children interpret threats may cause either anxiety or oppositional disorder (Hudson & Rapee, 2001).

Nolan, Flynn and Garber (2003) found further support for a rejection-depression link by analyzing reports from both parents and their offspring in a sample of non-

clinical youth. Another study by Magaro and Weisz (2006) contributed useful evidence regarding the association between parental behaviour and youth depression. They examined clinically referred youths aged between 7 and 17 years and their results illustrated that parental rejection was strongly linked to depressive and anxiety symptoms across gender and age. By contrast, parental control was not associated with any depressive or anxiety symptoms.

Considering parental rejection and control with regard to anxiety, observational studies have consistently reported an association between anxiety and both parental rejection and control (Hudson & Rapee, 2002). A review of the literature by Wood, McLeod, Sigman, Hwang and Chu (2003) cited six observational studies and 70% of these studies confirmed the relationship between parental rejection and control and anxiety in children and adolescents, while some studies relying on parent and child reports have yielded inconsistent findings. Adding to this, Hudson and Rapee (2002) found a positive relationship between parental over-control and children's anxiety. This finding was also supported by a series of studies by Parker (1990), who, however, emphasised that a combination of high parental control and low care was the strongest predictor of anxiety in young people.

Besides, parental modelling of anxiety illustrates that parents may pass on anxiety symptoms to their children who learn from this behaviour and may develop anxiety or avoidance behaviour themselves. Parents may model anxiety by displaying visual signs of fear, expressing information about their own anxiety in the presence of the child and by using avoidance as a coping strategy (Fisak & Grills – Taquechel, 2007). Evidence suggests that anxious modelling by parents contributes to the development of children's threat perception and this has been found to be linked to the

development of children's anxiety disorders (Muris, Steerneman, Merckelbach & Meesters, 1996).

Fifthly, another dimension of parental behaviour is anger and aggression. Parents who behave aggressively and use violence or abuse at home produce high levels of mental and physical problems in childhood and adolescence (Repetti et al., 2002). There is overwhelming documentation in this research field that demonstrates that anger, violence or abuse by parents are associated both cross-sectionally and prospectively with emotional and behavioural problems in children and adolescents, such as aggression, delinquency, antisocial behaviour and conduct disorders (Kaslow, Deering & Racusia, 1994; Wanger, 1997).

As presented above, dysfunctional parenting styles could influence mental health problems in adolescents (Bogels, & Brechman-Toussaing, 2006; Henry, et al., 2006; Muris, et al., 2003; Soenens & Beyers, 2012). However, this effect does not only go in one direction, as other studies have also shown that adolescent's behaviour could influence parenting practices. An example of the reciprocal influence between parenting and adolescent mental health problems has been described by Patterson's work (1982, 1986) on *coercive cycles*: a child's antisocial behavior elicits aversive reactions by the parent, which then accelerate the child's aggressive behavior.

Previous research is specifically supportive of a coercive process between child behaviors and parenting behaviors. For example, it has been found that Externalizing problems are associated with caregiver strain (Bussing et al. 2003a, b). Accordingly, delinquent behaviors and poor supervision have been found to show reciprocal influence; parental supervision appears to inhibit adolescents' involvement in delinquent behaviour, while delinquent behavioural problems were linked to reduction

of parental supervision (Laird et al. 2003). Bell and Chapman (1986) argued that parents might respond to adolescent problem behavior by raising their tolerance level for deviant behavior, which may result in decreased control attempts, and thus, parents might become less supportive and controlling when their adolescent's behavior becomes more aggressive and threatening. In support, a meta-analysis of 47 studies supported the bidirectional relationship between parenting and adolescents mental health, and found that that higher levels of control in the family were related to problems of under-control on the part of children, particularly more aggressive and delinquent behavior (Rothbaum & Weisz, 1994).

Finally, previous research has indicated that the association between maladaptive parental behaviour and adolescents' mental health problems could be affected by adolescents' temperament (Collins, et al., 2000). Temperament refers to those aspects of an individual's personality, such as introversion or extroversion, which are often regarded as innate rather than learned (Thomas, Chess & Birch, 1968). Temperamental characteristics are defined as "constitutionally based individual differences in reactivity and self-regulation" (Rothbart & Ahabi, 1994, p.50). A difficult temperament is characterised by negative affect and repeated demands for attention, a characteristic that is found to be linked to both Internalizing and Externalizing problems (Bates & Bayles, 1988, as cited in Collins et al., 2000). A correlation between temperamental characteristics and parental behaviour reflects interactive processes between the parent and the child (Collins et al., 2000). Good parental behaviour moderates associations between temperamental characteristics in childhood and later Externalizing problems (Rothbart & Bates, 1998, as cited in Damon, Lerner & Eisenberg, 2006). Similar findings were demonstrated by Rubin and colleagues, who

found that social withdrawal in adolescents was predicted by the interaction of negative parenting and inhibited temperament in toddlers (Rubin, Burgess & Hastings, 2002).

To conclude, the overall findings of existing studies seem to suggest the significant role of parental style and behaviour in the development of child psychopathology (Roelofs, et al., 2006; Soenens & Beyers, 2012; Wood, et al., 2003). Understanding parental style and behaviour can help parents and their offspring to steer adolescence more efficiently. The way parents behave within the family system can undermine or strengthen the impact of parenting on their adolescent children. In this respect, the how and why these processes occur are important in this kind of research.

3.6. Gaps in Knowledge

While it is generally assumed that family factors such as attachment, communication, functioning as well as parental style and behaviour play a role in the psychopathology of adolescents, most of the existing research tends to explore each factor separately without trying to combine them together and investigate which factor impacts more on the development of adolescent mental health problems. Many studies have examined different family factors in association with different mental health problems but very few have looked at attachment, communication, functioning and parental style and behaviour with regard to their prediction of adolescents' emotional and behavioural problems.

For example, in a study by Fendrich, Warner and Weissman (1990), family risk factors, including parents' marital discord, parent-child discord, control, low family cohesion and parental divorce, were examined in association with psychopathology in young people, with the results indicating that conflicts were the strongest predictors of

both Internalizing and Externalizing problems. However, this study is limited to attachment and communication. Another example is a study by Roelofs et al. (2006) who investigated the relationship between attachment and parental rearing behaviour and emotional and behavioural problems in non-clinical children. Even though they found that attachment played a less prominent role in both Internalizing and Externalizing problems than parental rearing behaviour, this study relied on non-clinical adolescents, and so it is remains unclear whether this finding can be replicated in children with mental health problems.

Although each of these family factors has been linked with indicators of adolescent emotional and behavioural problems (Fendrich, et al., 1990; Roelofs, et al., 2006), there is a very limited body of research examining all family factors (attachment, family communication and family functioning) in the same study as unique predictors of adolescent development. Thus, there is a need for understanding of the relevant and unique influence of several family factors within one study. In addition, even though previous studies looked at some family factors and examined their impact on adolescent mental health problems, their assumptions could not be generalised, as they did not test their hypotheses on a clinical sample. To the best of our knowledge, there is no study that combines the four crucial factors – attachment, communication, functioning and parental style and behaviour – and compares differences between clinical and non-clinical adolescents in one piece of research.

Most importantly, there is a huge gap in knowledge regarding the impact of family on adolescent psychopathology in Cyprus, the country where this project's data was collected, as research is still baseline. Understanding the prevalence of mental health disorders among adolescents in Cyprus, as well as the association between family

and adolescent mental health problems, is an essential component of sound public policy for the provision of mental health and other services. The lack of attention to the mental health of adolescents and family risk factors in Cyprus may lead to mental disorders with lasting consequences and reduce society's ability to be safe and constructive.

CHAPTER 4: METHODOLOGY

4.1. Overview

This chapter begins by providing a summary of the methodology used. It then goes on to explain the epistemological stance of this Thesis. The participants and instruments used are then described. Finally, an outline is provided of the data collection procedure and data analyses used.

4.2. Research Method of the Thesis

This Thesis involves a mixed-method approach, by using quantitative and qualitative data. According to Tashakkori and Teddlie (2003a), a mixed-method design can help research to better clarify its findings. Thus, this Thesis aims to use one method to inform the other. Respectively, for the purposes of this Thesis, the time ordering of these research methods was carried out sequentially with the quantitative research taking place prior to the qualitative research. This order provides an integrated way, as the nature of the project is to use a qualitative method in order to examine in more depth and better understand the findings from the studies carried out using the quantitative research method.

Philosophically, mixed-method research is the third research movement, which includes the use of induction, deduction and abduction (Johnson & Onwuegbuzie, 2004). However, in order to mix research in an effective way, there is a need to consider the main characteristics of both quantitative and qualitative research. Briefly, quantitative research is characterized by the generalization of findings when the data is based on a

random sample. In addition, it is a quick method for assessing a large population, where the results are independent of the researcher (Punch, 2014). In contrast, some of the main weaknesses of quantitative research, as argued by Johnson and Onwuegbuzie (2004) are the fact that the researcher's categories may not reflect the participants' understanding.

Qualitative research is based on the idea that the researcher is interested in how people make sense of the world and how they experience events. It tends to be concerned with the quality and texture of the experience, rather than with the identification of the cause-effect relationship (Willig, 2013). It can be also characterized by rich detail, which can provide a better understanding of people's perceptions of a specific topic (Punch, 2014). On the other hand, knowledge produced by qualitative research cannot be generalized to other people, as its findings are unique to the particular population assessed. In addition, it is a time- consuming method and its results may be influenced by the researcher's personal biases and idiosyncrasies (Johnson & Onwuegbuzie, 2004).

An understanding of the strengths and weaknesses of both quantitative and qualitative research puts this Thesis in a position to combine these strategies in more effective way in order to strength the advantages of both designs and overlap their weaknesses. As stated in the Johnson and Turner (2003) principle, called *the fundamental principle of mixed-method*, this combination in data collection results in complementary strengths and non-overlapping weaknesses.

According to Creswell and Plano Clark (2007), there are four types of mixed-methods designs. Firstly, there is the triangulation design, a one-phase design where two types of data are collected at the same time. Secondly, there is the embedded design,

where the one research design is embedded within a design framed by the other type. Thirdly, there is the explanatory design, a two-phase design, where qualitative data is used to build upon quantitative results. And lastly, there is the exploratory design, where qualitative data is collected at the first stage, followed by quantitative data in the second phase. Based on Creswell and Plano Clark's (2007) types of mixed-method designs, this Thesis uses a sequential explanatory design. In accordance with this design, the researcher first collected and analyzed quantitative data, and followed this by collecting and analyzing qualitative data, which helped explain and elaborate the quantitative results obtained in the first phase. The two stages are then connected in the discussion stage of this Thesis. The rationale of this approach is that quantitative data could provide a general understanding of the research problem, while qualitative data could help to refine and explain the statistical results, by exploring the participants' views in more depth (Tashakkori & Teddlie, 1998).

Table 4.1: Description of Research Methods employed in the Thesis

Study	Design	Method of Analysis	Means of Data Collection
Chapter 5	Cross-Sectional	Between-participants	Survey
Chapter 6	Cross-Sectional	Within- and Between-participants	Survey
Chapter 7	Qualitative	Thematic Analysis	In person semi-structured interviews

4.3. Epistemological Stance of the Thesis

As argued by Tashakkori and Tedlie (2003a), a mixed-method design is separated from the positivist perspective of quantitative research on the one hand, and the constructivist perspective of the qualitative research on the other. Thus, the challenge and the reward of conducting mixed-method research is the opportunity to use

both approaches, leading to a far greater understanding of the associations and behaviour under investigation.

The quantitative Chapters of this Thesis (Chapter 5 and Chapter 6) employed a large sample and aim to address the relationship between sets of constructs, such as emotional and behavioural problems. In comparison, the qualitative Chapter (Chapter 7) employed a smaller sample size and is predominantly concerned with the process and the context of the participants' perceptions. Furthermore, quantitative studies are problem-oriented, whereas the qualitative study is individual-oriented.

Quantitative research is based on the idea that reality can be observed in statistical terms. According to Cronbach (1957), there are two strands of quantitative research that can either be considered separately or together. The first strand is the comparison between groups, with t-tests and analysis of variance as its main features. The second strand is the relationship between variables, where correlation and regression are its main elements. This Thesis used both strands, aiming to collect empirical data and to use statistical methods to answer the research questions (further analysis of this will be found in the following chapters).

Qualitative research is based on the idea that reality is not objective (Howitt, 2013). There are three epistemological biases for qualitative research: the realistic approach, the phenomenological approach and the social constructionist approach (Willig, 2013). This Thesis fits into the realistic approach where knowledge captures and reflects as truthfully as possible something that is happening in the real world (Willig, 2013). The realistic approach assumes that something exists independently of the researcher's views and knowledge and, indeed, it depends on the participants' point of view and knowledge of reality. In addition, Willig (2013) explained this approach as

"processes of a social and psychological nature which exist and which can be identified. These processes are *real* in that they characterize or even determine the behaviour and/or thinking of research participants, irrespectively of whether or not the research participants are aware of this" (p.15). Based on this, Chapter 7 uses qualitative research where the researcher can theorize motivations, experiences and meaning in a straightforward way because, as argued by Potter and Wetherell (1987), in a realistic approach, a simple, largely unidirectional relationship is assumed between meaning, experience and language.

4.4. Participants Used in the Thesis

A total of 737 adolescents were recruited for the quantitative part of this research. Specifically, 645 adolescents were from community setting and 92 adolescents were recruited from clinical setting, aiming to obtain data that could firstly be representative of Cypriot population and, secondly, to compare findings between the community and clinical settings. All adolescents ranged in age from 12 to 17 years.

With regard to the qualitative study, a sub-sample of both the above groups was examined. Specifically, ten adolescents from each group (N=20) participated in the qualitative study of this Thesis. Moreover, one parent of each of these adolescents (N=20 parents) was also recruited in the qualitative study in order to obtain a more comprehensive picture of the dynamics between adolescent mental health and the family.

4.5. Procedure

4.5.1. Procedure of Adolescents from Community Setting

In addition to the University of Roehampton ethical approval (Appendix I), ethical approval from Ministry of Education and Culture (Appendix II) was required in order to recruit adolescents from community setting. From a list of all public Junior High and Senior High Schools across all districts in Cyprus, ten Junior High and ten Senior High Schools were randomly selected. The Head of each of these schools was contacted and asked if the school is interested to participate in the project. Once the school agreed, a meeting was arranged to give further information about the project and for them to raise any questions that they might have. During this meeting, they were also provided with information sheet (Appendix V) and consent forms for both adolescents and their parents (Appendices VI, VII, VIII, IX), so that the teachers could distribute them to the adolescents to bring home to their parents participants were randomly drawn from each school. Only adolescents who brought back the consent forms signed by both them and their parents, were able to complete the questionnaire.

4.5.2. Procedure of Adolescents from Clinical Setting

In addition to the University of Roehampton ethical approval (Appendix I) ethical approval was obtained from both the Cyprus National Bioethics Committee (Appendix III) and Ministry of Health (Appendix IV) in order to approach Child and Adolescent Mental Health Services in Cyprus. Participants from clinical setting were selected by Psychologists. Those adolescents who were interested in taking part in the research were provided with a consent form for themselves (Appendix XI) and their

parents (Appendix XII). Once the forms were signed by both adolescents and their parents, a day and time was arranged in a quite room in the Child and Adolescent Mental Health Unit in order to administer the questionnaire. Completion of the questionnaire was carried out the presence of the researcher and a staff of the unit.

4.6. Materials

4.6.1. Instruments Used in the Quantitative Research (Study 1 and Study 2)

Participants in Study 1 (Chapter 5) and Study 2 (Chapter 6) were given the same questionnaires: Youth Self-Report (YSR), Inventory of Parent and Peer Attachment (IPPA), Family Adaptability and Cohesion Evaluation Scale (FACES), Strengths and Difficulties Questionnaire (SDQ) and Spence's Children Anxiety Scale (SCAS). Apart from the IPPA, all the questionnaires were translated into Greek and have been used in numerous previous studies in Greece and/or Cyprus (Essau, Anastassiou-Hadjicharalambous & Munoz, 2011; Essau, Olaya, Anastassiou-Hadjicharalambous et al., 2012; Roussos, Francis, Zoubou, Kiprianos, Prokopiou, & Richardson, 2001). Thus, the IPPA scale was translated into Greek and a confirmatory factor analysis was conducted in order to check its psychometric properties, its factor structure as well as its validity and reliability (see Section 4.5.1.5.1),

The IPPA scale was translated using a back translation procedure. As proposed by Beaton, Bombardier, Guillemin and Ferraz-Spine (2000), two bilingual translators, who were also native speakers and culturally aware, had translated the scale from English to Greek, and from Greek to English. Any differences in the original and the back-translated version of the IPPA were discussed and resolved by both translators.

During this joint meeting, the semantic, idiomatic, experiential and conceptual equivalences of the IPPA were also discussed.

4.6.1.1. Youth-Self Report

The ***Youth Self Report*** (YSR; Achenbach, 1991b) (Appendix XIII.3) was used to measure psychosocial competences and emotional and behavioural problems. The questionnaire consists of two parts. The first part contains a series of questions assessing adaptive behaviour on two scales (Activities and Social scales) as well as a Total Competence scale. Examples of questions asked included "Compared to others of your age, about how much time do you spend on each sport?" or "About how many close friends do you have?" The second part contains 113 problem items, which are scored on a 3-point scale as follows: 0=not true, 1=somewhat or sometimes true, 2=very or often true, apart from question 56h which is an open-ended item (i.e. Physical problems without known any medical cause: Other). Youths decide for themselves how true each item is now or was within the past six months.

The YSR can be scored on the total problems scale, which is the sum of the scores of each problem item. The problem items can be combined to form eight syndrome scales, which can further be divided into two broadband scales, namely Internalizing and Externalizing scales. The Internalizing scale is made up of the Withdrawn (e.g., "I would rather be alone than with others"), Somatic Complaints (e.g., "I feel dizzy or lightheaded") and Anxious/Depressed (e.g., "I feel lonely"). The Externalizing scale is made up of Delinquent Behaviour (e.g., "I don't feel guilty after doing something I shouldn't") and Aggressive Behaviour (e.g., "I am mean to others") scales. Other scales that are assessed are Social Problems (e.g., "I act too young for my

age"), Thought Problems (e.g., "I can't take my mind off certain thoughts"), Attention Problems (e.g., "I have trouble concentrating or paying attention"), and Other Problems (e.g., "I don't eat as well as I should"). Internalizing problems are considered as emotional disturbances or behavioural deficits, while Externalizing problems reflect conduct disorders or behavioural excess.

The original English version of the YSR (Achenbach, 1991b) and its Dutch version (Verhulst, Van der Ende, Ferdinand, & Kasius, 1997) showed good reliability and validity. Findings on the good reliability and validity of the YSR have been replicated in American, German and Dutch studies of children and adolescents in clinical and epidemiological settings (Steinhausen, Metzke, Meier, & Kannenberg, 1998; Van Lang, Ferdinand, Oldehinkel, Ormel, & Verhulst, 2005). Specifically, a study by Verhulst et al. (2003) assessing reliability and validity of the YSR across seven cultures, showed that the ranges of Cronbach's alphas for each of the 11 Youth Self-Report scales were: for Withdrawn (0.52–0.64), Somatic Complaints (0.65–0.76), Anxious/Depressed (0.79–0.86), Social Problems (0.46–0.64), Thought Problems (0.49–0.69), Attention Problems (0.64–0.74), Delinquent Behaviour (0.51–0.70), Aggressive Behavior (0.76–0.83), Internalizing (0.83–0.89), Externalizing (0.82–0.86), and Total Problems (0.92–0.95).

4.6.1.2. Strengths and Difficulties Questionnaire

The ***Strengths and Difficulties Questionnaire*** (SDQ; Goodman, 1997) (Appendix XIII.4) was used to measure both positive and negative behavioural attributes in adolescents aged 11-17 years. The questionnaire contains 25 items, with every five items being categorized on the following scales: Hyperactivity (e.g., "I am

restless, I cannot stay still for long"), Emotional Symptoms (e.g., "I worry a lot"), Conduct Problems (e.g., "I get very angry and often lose my temper"), Peer Problems (e.g., "I am usually on my own. I generally play alone or keep to myself") and Pro-social (e.g., "I try to be nice to other people. I care about their feelings"). Each item can be rated on a 3-point Likert scale, ranging from 0 ("Not True") to 2 ("Certainly True"). The total difficulty score is the sum of the scores on the hyperactivity, emotional symptoms, conduct problem and peer problem scales. The reliability of the SDQ has been reported in numerous studies as good, with Cronbach's α being around the value of .73 (Goodman, 1999, 2001; Mellor, 2004, Mellor & Stokes, 2007), including a previous study conducted in Cyprus (Essau, Olaya, Anastassiou-Hadjicharalambous et al., 2012).

4.6.1.3. Spence Children's Anxiety Scale

The ***Spence Children's Anxiety Scale*** (SCAS; Spence, 1997) (Appendix XIII.5) was used to assess symptoms of anxiety disorders: the Separation Anxiety scale (e.g., "I worry about being away from my parents"), the Social Phobia scale (e.g., "I feel afraid if I have to use public toilets or bathrooms"), the Obsessive-Compulsive scale (e.g., "I have to keep checking that I have done things right (switching things off or locking the door), the Panic/Agoraphobia scale (e.g., "I suddenly start to tremble or shake when there is no reason for this), the Generalized Anxiety/Overanxious scale (e.g., "When I have a problem, I get a funny feeling in my stomach") and the Physical Injury Fears scale (e.g., "I am scared of going to the doctor or dentist") (Spence, Barrett, & Turner, 2003). It contains 38 items that can be rated on a 4-point scale, ranging from 1 to 4 (1– never, 2 – sometimes, 3 – often, or 4 – always) to indicate how often each of the items

happens to them. Although SCAS was developed for use in community setting, it has also norms for clinically referred children and adolescents (Spence, 1997, 1998).

The subscale scores are computed by adding the individual items' scores included in each subscale, while the total SCAS sore is obtained by adding together the scores of all the 38 items. The reliability of the SCAS has been reported in numerous studies (e.g. Spence, 1998), with coefficient alphas for the subscales ranging from 0.60 to 0.92. Good reliability and validity of the SCAS have been found in several studies conducted in community and clinical settings in numerous countries (Murris, Schmidt, & Merckelbach, 2000; Essau, Muris, & Ederer, 2002; Mellon & Moutavelis, 2007), including Cyprus (Cronbach's α: .92) (Essau, Anastassiou-Hadjicharalambous & Munoz, 2011).

4.6.1.4. Family Adaptability and Cohesion Evaluation Scale

The ***Family Adaptability and Cohesion Evaluation Scale*** (FACES IV; Olson, 2011) (Appendix XIII.6) was used to evaluate family functioning, family communication and family satisfaction. It contains a total of 62 items, which are subdivided into two balanced scales and four unbalanced scales. The two balanced scales, Balanced Cohesion (e.g., "Family members are involved in each other's lives") and Balanced Flexibility (e.g., "In solving problems, the children's suggestions are followed"), are used to measure superior family functioning; the higher the score, the more positive the functioning. The four unbalanced scales are used to measure inferior family functioning, including low and high extremes of cohesion and flexibility. These four scales are Disengaged (e.g., "Family members feel closer to people outside the family than to other family members"), Enmeshed (e.g., "Family members feel

pressured to spend most of their free time together"), Rigid (e.g., "There are strict consequences for breaking the rules in our family") and Chaotic (e.g., "There is no leadership in this family"). In addition, in order to create a single score for the cohesion and flexibility dimensions, the following formulae were created:

$$Cohesion\ Score = Balanced\ Cohesion / \left(\frac{Disengaged + Enmeshed}{2}\right)$$

$$Flexibility\ Score = Balanced\ Flexibility / \left(\frac{Rigid + Chaotic}{2}\right)$$

The FACES IV also contains items that can be used to measure Family Communication and Satisfaction. While the Family Communication scale (e.g., "Family members are able to ask each other for what they want") addresses some aspects of communication in the family system, the Family Satisfaction subscale (e.g., "Your family's ability to cope with stress") is used to measure the satisfaction of family members with regard to family cohesion, flexibility and communication (how happy family members are with their family system).

The balanced, unbalanced and communication scales are rated by using a 5-point Likert scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree). However, the satisfaction scale ranges from 1 (Very dissatisfied) to 5 (Extremely satisfied). The FACES IV has been reported to be valid, reliable and discriminatory among both problematic and non-problematic families, with reliability being between 0.77 and 0.89 (Olson, Gorall, & Tiesel, 2006; Rivero, Mrtinez-Pampliega, & Olson, 2010).

4.6.1.5. Inventory of Parent and Peer Attachment

The ***Inventory of Parent and Peer Attachment*** (IPPA; Armsden & Greenberg, 1987) (Appendix XIII.7) was used to assess the extent to which adolescents feel that their parents and friends are accepting, respectful and reliable confidants. It contains 28 items for parents and 25 peer items. Both parent and peer scales contain three broad dimensions: communication, trust and alienation. The items that comprise the Communication subscale measure the quality and degree of spoken communication with both parents (e.g., "I tell my parents about my problems and troubles") and peers (e.g., "My friends encourage me to talk about my difficulties"). The items, which comprise the Trust subscale, measure the mutual trust, understanding and respect existing between the participants and either their parents (e.g., "My parents respect my feelings") or their peers (e.g., "My friends listen to what I have to say"). The final subscale, Alienation, measures anger and interpersonal isolation between the participants and their parents (e.g., "I don't get much attention at home") and their peers (e.g., "I get upset a lot more than my friends know about"). Each item is scored on a 5-point Likert scale, ranging from 1 (almost never or never true) to 5 (almost always or always true). Six of its items have reversed scores.

The IPPA has shown good reliability and validity as a measure of perceived quality of close relationships in late adolescence (Parents Scale: Trust Cronbach's a: .9, Communication Cronbach's a: .91, Alienation Cronbach's a: .86; Peers Scale: Trust Cronbach's a: .91, Communication Cronbach's a: .87, Alienation Cronbach's a: .72) (Armsden & Greenberg, 1987; Laible, Carlo, & Raffaelli, 2000; Essau, 2004; 2010). A study examining the validity of this scale has shown that scores on the IPPA have been found to be associated with personality variables such as positiveness and high and

stable self-esteem, high levels of life satisfactory and affective status (Laible, Carlo, & Raffaelli, 2000).

4.6.1.5.1. Adaptation of the IPPA Scale into Greek

Because the Greek version of the IPPA had not been used in previous studies, its psychometric properties and factor structure were examined in the present study using Confirmatory Factor Analysis (CFA). The CFA was conducted using the AMOS 18 maximum likelihood method, (Arbuckle & Wothke, 1999). Before conducting reliability and validity examinations of the scale, a series of preliminary analysis was performed, including screening of the data, normality testing, and testing for outliers and missing data. Normality was within the accepted level (± 3.29) of skewness and kurtosis. Replacement of missing values with the mean can be made if each variable has at least 5% missing value (Tabachnick & Fidel, 2001). In the present data, less than 5% of the given responses were missing values. Two separate confirmatory factor analyses were conducted for the parent and peer versions. For the purposes of this examination, only the community sample was used (N=645; study 1).

4.6.1.5.1.1. Confirmatory Factor Analysis for the IPPA Parent Scale

Confirmatory factor analysis was conducted on two alternative models. The first model was the three-factor, 28-item model derived from the original theoretical basis of the scale. However, two of the items (5 and 10) were detected to be non-significantly predicting the factor and were loaded lower than acceptable value (<.30; Tabaschnick &

Fidel, 2001), thus they were excluded by employing the suggestions given in the modification indices (Table 4.2).

Table 4.2: Items loading of the IPPA Parent and Peer Scales

	Parent				Peers			
Items	**Trust**	**Communication**	**Alienation**		**Trust**	**Communication**	**Alienation**	
24	.76					.69		
13	.74				.75			
21	.71				.72			
1	.70					.65		
14	.68				.71			
23	.68						.23	
2	.60					.70		
4	.43						.60	
3	.43					.64		
10	**-.05**			**Exc.**			.57	
20		.70			.75			
16		.69				.66		
17		.68				.56		
6		.61			.62			
26		.64						
28		.59						
8		.51			.62			
7		.31				.73		
15		.23			.71			
5		**.09**		**Exc.**	.46			
27			.67					
22			.64				.44	
12			.62		.69			
11			.60				.66	
19			.59		.67			
18			.59				.62	
25			.54			.69		
9			.43				**.02**	**Exc.**

Thereafter, confirmatory factor analysis was re-conducted with a 26-item model derived from the present analysis. The adequacy of the competing models was evaluated using five different fit indices: (1) the chi-square fit statistic of the model, a measure of overall fit, with non-significant χ^2 indicating a good fit; (2) χ^2 divided by the degrees of freedom, with a ratio of between two and three signifying a good fit; (3) the comparative fit index (CFI; Bentler, 1990), with values above .95 representing a good

fit; (4) the root mean square of approximation (RMSEA; with values over .10 leading to rejection of the model, those from .05 to .08 acceptable, and values below .05 indicating a good fit; (5) the Tucker-Lewis Index (TLI), which takes into account the degree of parsimony, with scores of above .90 regarded as a reasonable fit (Schumacker & Lomax, 1996).

The first model (Appendix XX.1) showed that the chi-square was significant, indicating a poor fit ($\chi^2 = 1174.3$, $df = 347$). Because the χ^2 statistic is easily influenced by the large sample size, multiple goodness-of-fit indices were used to evaluate the fit between the model and the data (Bentler & Bonett, 1980). Since the values of fit indices (CFI = .85; GFI = .86; TLI = .84; RMSEA = .06) indicated a very poor fit, the second model was tested after removing the two items non-significantly loaded on the factors.

Several authors have recommended using parceling items because the parcels' scores are more likely to be distributed normally than those of single items (Bandalos, 2008; Nasser & Wisenbaker, 2003). Furthemore, "the resulting reduction in the complexity of measurement models should lead to more parameter estimates" (Nasser & Wisenbaker, 2003; p. 730). In addition, since the parcels reduce the number of indicators in the model, more accurate models can be used. Thus, item parceling was adopted.

Our result showed that removing the two nonsignificant items, dealing with residual errors, and parceling the items resulted in a significant improvement in the model fit ($\chi^2 = 126.53$, $df = 24$, $\chi^2 / df = 5.27$; CFI = .96, GFI = .96, TLI = .94, RMSEA = .08); thus this second model (Appendix XX.2) was retained as the final model.

4.6.1.5.1.2. Confirmatory Factor Analysis for the IPPA Peers Scale

Similarly with the IPPA Parent scale, confirmatory factor analysis was conducted for the IPPA Peers scale on two alternative models. The first model (Appendix XXI.1) was the three-factor, 25-item model derived from the original theoretical basis of the scale. One of the items was detected to be non-significantly predicting the factor. The factor loading was also checked for this item and the factor loaded was found low (CFI = .86; GFI = .86; TLI = .84; RMSEA = .07). For this reason, item number 9 was excluded from the IPPA Peer version (Table 4.2). With the exclusion of item 9, the confirmatory factor analysis for the second model (Appendix XXI.2) was tested using 24 items. As with the IPPA Parent scale, the item parceling method was used. Results revealed that the 24-item three-factor model was fit on the data (χ^2 = 81.14, *df* = 24, χ^2 / *df* = 3.38; CFI = .98, GFI = .97, TLI = .97, RMSEA = .06); thus this model was retained as the final model.

4.6.1.1.3. Reliability of the Greek Version of the IPPA Scale

The internal consistency reliability of the IPPA Parent scale was found to be good with Cronbach's alpha .72. The Cronbach alphas for the Trust, Communication and Alienation subscales were .86, .79 and .81 respectively. A separate internal consistency analysis was conducted for the IPPA Peer scale. The Cronbach alpha of this version was found to be .84. The Cronbach alphas for the Trust, Communication and Alienation subscales were .90, .86 and .71 respectievly.

4.6.1.1.4. Validity of the Greek Version of the IPPA Scale

Pearson correlations between the parent and peer scales and subscales were computed. The Trust and Communication subscale scores were highly correlated within both parent (r = .74) and peer (r = .93) scales (Table 4.3), indicating that the more trust the adolescents have in both their parents and peers, the better they communicate with each other. Findings also showed that alienation was negatively correlated with both trust and communication on both parent and peer scales. This indicates that having strong feelings of alienation were associated with low feelings of trust and poor communication with parents and peers.

Table 4.3: Intercorrelations of IPPA Parent and Peer Scales

	Parent			Peers		
	Trust	Communication	Alienation	Trust	Communication	Alienation
Parent						
Trust	-	.74	-.47	.93	.36	-.30
Communication		-	-.50	.36	.32	-.29
Alienation			-	-.18	NS	.55
Peer						
Trust				-	.81	-.48
Communication					-	-.29
Alienation						-

Divergent and convergent validities were established by calculating Pearson correlation coefficients between IPPA parent and peer scales and the Family Adaptability Cohesion Evaluation Scale (FACES), Youth Self Report (YSR), Strengths and Difficulties Questionnaire (SDQ), and Spence's Children Anxiety Scale (SCAS). Scores on the FACES, YSR, SDQ and SCAS subscales were significantly related to IPPA parent and peer scores in the expected directions of Cypriot adolescents, providing evidence of its validity (Table 4.4).

Table 4.4: Intercorrelation between FACES, YSR, SDQ and SCAS subscales with IPPA Parent and Peer subscales

	Parent			Peers		
	Trust	Communication	Alienation	Trust	Communication	Alienation
FACES						
Balanced Cohesion	.54*	.47*	-.28*	.41*	.37*	-.24*
Balanced Flexibility	.51*	.43*	-.25*	.43*	.41*	-.20*
Disengaged	-.39*	-.40*	.48*	-.17*	-.06	.41*
Enmeshed	.04	.01	.21*	-.08*	-.00	.28*
Rigid	.16*	.18*	.11*	.11*	.16	.14*
Chaotic	-.17*	-.24*	.41*	-.14*	-.02	.39*
Communication	.57*	.50*	-.37*	.40*	.37*	-.29*
Satisfaction	.54*	.50*	-.33*	.31*	.25*	-.20*
Cohesion	.60*	.53*	-.35*	.37*	.32*	-.26*
Flexibility	.37*	.26*	-.11*	.32*	.34*	-.07
YSR						
Withdraw	-.28*	-.32*	.48*	-.15*	-.07	.36*
Somatic Complaints	-.23*	-.19*	.37*	-.08	.05	.23*
Depressed	-.26*	-.26*	.51*	-.12*	-.00	.36*
Social Problems	-.33*	-.27*	.41*	-.25*	-.15*	.38*
Thought Problems	-.22*	-.24*	.38*	-.08*	-.01	.19*
Attentional Problems	-.31*	-.31*	.37*	-.13*	.02	.31*
Delinquent Behaviour	-.37*	-.33*	.42*	-.19*	-.09*	.25*
Aggressive Behaviour	-.28*	-.26*	.45*	-.07	.04	.24*
Other Problems	-.37*	-.33*	.54*	-.20*	-.08	.34*
Internalizing Problems	-.30*	-.30*	.54*	-.14*	-.01	.37*
Externalizing Problems	-.34*	-.31*	.44*	-.12*	-.00	.27*
SDQ						
Emotional Symptoms	-.26*	-.19*	-.40*	-.18*	-.02	-.41*
Conduct Problems	-.29*	-.23*	.31*	-.26*	-.15*	-.35*
Hyperactivity	-.20*	-.28*	-.36*	-.19*	-.08	.32*
Peer Problems	-.19*	-.16*	.23*	-.37*	-.30*	.40*
Prosocial	.26*	.28*	-.13*	.36*	.40*	-.19*
SCAS						
Separation Anxiety	-.13*	-.06	.25*	-.19*	-.09*	.35*
Social Phobia	-.19*	-.16*	.38*	-.08*	-.01	.32*
Obsessive/Compulsive	-.17*	-.11*	.26*	-.05	.04	.29*
Panic/Agoraphobia	-.25*	-.18*	.33*	-.23*	-.13*	.42*
Physical Injury Fears	-.13*	-.07	.25*	-.11*	-.01	.31*
Generalized Anxiety	-.17*	-.11*	.37*	-.04	.07	.30*

*$p < .05$

4.6.2. Questions Used in Qualitative Research (Study 3)

For the qualitative research of this Thesis, two separate interview schedules were developed: one for adolescents (Appendix XVIII) and one for their parents (Appendix XIX). Both interview schedules contained the same questions, but referred to

a different person. For example, the interview with the adolescents asked “Can you please describe your relationship with your parents?”, while the interview with the parents asked “Can you please describe your relationship with your child”. The interview schedule was structured in a natural, sensible and helpful sequence. More explicit information regarding the interviews is discussed in Chapter 7, Section 7.3.3.

4.7. Data Collection of the Thesis

For the collection of the data in the quantitative research, this Thesis has used a survey. Since the aim was to generate findings based on a sample of adolescents, either diagnosed or not with any mental health problem, data was collected via a survey. A survey is defined as a method of collecting information from a sample of individuals and which provides an important source of basic scientific knowledge (Scheuren, 1980). It is one of the most common methods used in psychological research, as it is fast, cheap and easy (Stangor, 2004). Surveys are useful in describing the characteristics of a large population. No other research method can provide this general capability.

In contrast, the survey method has two major disadvantages. First, it can be affected by an unrepresentative sample and, second, the participants may affect the outcome. For example, some participants try to please the researcher, lie to make themselves look better, or have mistaken memories. It may be hard for the participants to recall information or to tell the truth about a controversial question. To minimize these limitations, this Thesis used, first, random sampling in order to avoid an unpredictable sample and second, it used measures that include the retrieval of recent memories in order to avoid mistakes based on a failure of memory. For example, the

Youth Self Report asks participants to provide answers on the basis of how each question describes situation now or within the past six months.

For the collection of the qualitative data, this Thesis has employed semi-structured, face-to-face, interviews. Semi-structured interviews are one of the most common methods used in qualitative research as they provide the opportunity to the researcher to hear the participants talk about an aspect of their lives, behaviour, attitudes or experiences (Willig, 2013). In addition, this method of data collection depends on the relationship between the interviewer and the interviewee, because it combines features of both formal and informal conversation, such as fixed roles, the open-endedness of the questions and an emphasis on narrative and experience (Willig, 2013). In order to ensure that the rapport between the interviewer and the interviewee was not disrupted, sensitive and ethical negotiation was taken into consideration, so that the interviewer did not abuse the informal ambience of the interview and encouraged the interviewee to reveal more information in a comfortable manner.

4.8. Data Analysis of the Thesis

Data from the self-report questionnaires (Chapter 5 and Chapter 6) was analysed using SPSS, Version 19.0 (SPSS, Chicago, IL). Several parametric and non-parametric tests (such as Multivariate Analysis of Variance (MANOVA), and Mann-Whitney tests) and Regression analysis were conducted in order to address the aims of each chapter.

The qualitative data analysis in Chapter 7 involves the use of Thematic Analysis, whereby the qualitative findings are built from the original raw data. Thematic analysis was chosen because of the flexibility and latitude it affords to researchers in terms of

theoretical and epistemological assumptions. This analysis uses six phases as suggested by Braun and Clarke (2006), involving developing codes, identifying and refining themes, and constructing thematic networks (for more details, see Chapter 7, Section 7.3.5). This decision was also based on the aim of the study, which is to identify and describe patterns across data rather than to build a theory.

CHAPTER 5: ADOLESCENT MENTAL HEALTH PROBLEMS IN A CYPRIOT COMMUNITY SETTING: THE IMPACT OF FAMILY (STUDY 1)

5.1. Overview

The primary objective of this chapter is to assess the overall prevalence of adolescent mental health problems. The role of both gender and age in adolescent mental health problems will also be assessed. The secondary objective of this chapter is to explore the relationship between family attachment, family communication and family functioning with mental health problems in adolescents from a community sample.

5.2. Introduction

Recent epidemiological studies have shown that mental health problems, such as anxiety and depression, mostly have their first age-onset during adolescence (DuRant, Smith, Kreiter & Krowchuk, 1999; Jessor, Donovan, & Costa, 1991). Therefore, a cumulative number of research papers have examined factors that put adolescents at risk in developing mental health problems at several levels of the social environment including the family, peers, school and community (Barber, 1992; Youngblade, Theokas, Schulenberg, Curry, Huang, & Novak, 2007). Growing attention is focused on the family context as it plays a central role in adolescents' psychological development and wellbeing (Claveirole & Gaughan, 2011; Kenny, Dooley, & Fitzgerald, 2013; Lee

& Bukowski, 2012; Wenar & Kerig, 2005). One way of expanding such knowledge is by identifying which family aspects predict adolescent psychopathology.

Recently, several studies have attempted to explore the effects of the family in adolescent mental health problems, by using Internalizing and Externalizing problems (Keijsers, et al., 2012; Kenny et al., 2013; Muris, et al., 2003). According to different family models, such as McMaster Model of Family Functioning (Guttman, et al., 1972), the dimensions of family functioning – including cohesion and adaptability, family communication and parental attachment – are linked to adolescents' psychological wellbeing (Epstein, Bishop, & Levin, 1978; Olson, Russell, & Sprenkle, 1989; Roelofs, et al. 2006).

In exploring attachment and mental health problems, previous research has indicated that insecure attachment is associated with both Internalizing and Externalizing problems (Muris et al., 2003; Roelofs, et al., 2006). For example, in a study by Muris et al. (2003), adolescents who classified themselves as insecurely (avoidantly or ambivalently) attached to their parents displayed higher scores on both Internalizing and Externalizing problems than adolescents who classified themselves as securely attached to their parents. In support, Fanti et al. (2008) found that a lack of trust and communication, especially between an adolescent and the mother, was associated with Internalizing problems. Thus, insecure attachment seems to be linked to increased levels of both Internalizing and Externalizing problems in adolescents.

Another question that has been raised by previous research, is whether or not poor family functioning predicts adolescent mental health problems. There are findings in the family functioning literature which argue that dysfunctional families predict

adolescents' Externalizing and Internalizing symptoms in both boys and girls (Lai Kwok & Shek, 2009; Theobald & Farrington, 2012). In a series of studies by Barber (1992, 1996), cohesion was reported to be associated negatively with both Internalizing and Externalizing problems, while enmeshed is strongly associated with only Internalizing problems. In addition to this, engagement between family members was also found to be a promoting factor of adolescents' wellbeing, when internalizing and externalizing behaviour was assessed (Youngblade et al., 2007).

Finally, the quality of communication among family members seems to be associated both positively and negatively with adolescents' mental health status. As discussed in the literature review (Chapter 3, Section 3.4), numerous studies have indicated a link between psychopathological symptoms and family communication (Resnick, 2000; Scales, 1997). Levin and Currie (2010) found that children who experienced difficult communication with parents were vulnerable to the development of behavioural and emotional problems. Similarly, in a sample of 42,305 adolescents aged 11 to 17, good family communication was related to lowered levels of Internalizing and Externalizing problems (Youngblade et al., 2007).

In addition, the existing literature (see Chapter 2, Sections 2.2.3 and 2.2.4) has shown that mental health problems in adolescents were also associated with both gender and age (Lee & Stone, 2012; Leve, Kim, & Pears, 2005). For example, among Greek and Spanish non-referred adolescents, girls were found to have higher scores than boys in anxiety, withdrawal, thought and attention problems, while boys had higher scores in delinquent and aggressive behaviours (Roussos, Francis, Zoubou, Kiprianos, Prokopiou, & Richardson, 2001; Sandoval, Lemos, & Vallejo, 2006). Studies have also shown age differences in the prevalence of mental health problems. While there are studies

indicating that older adolescents exhibit more delinquent and aggressive problems older (Roussos, et al., 2001) and Internalizing problems (e.g. depression, thought problems and withdrawn syndrome) (Sandoval, et al., 2006) compared to younger adolescents, others have found that Externalizing problems decreased over time (Leve, Kim & Pears, 2005).

Taking into account the existing literature on the association between adolescent mental health problems and family, and adding to the fact that no previous studies indicated prevalence rates of adolescent mental health problems in Cyprus, this study's main objectives are to explore prevalence rates of Cypriot adolescent mental health problems from community setting and to investigate the association between family and adolescents' psychopathological problems. More specifically, this study will assess:

- *The prevalence of mental health problems among adolescents in the general population*.
- *Which mental health problem is the most common among this sample*.
- *If there gender and age accounts for differences between emotional and behavioural problems in adolescents*.
- *The association between family attachment, family communication and family functioning and adolescents' emotional and behavioural problems*.
- *If there are any gender and age effects on family factors*.

The hypotheses to be explored in this study are as follows: 1) The prevalence rate will be within WHO reported rates (WHO, 2001), ranging from 10% to 20%; 2) the most common mental health problem will be anxiety, as it is the most common disorder found in most Mediterranean countries (Frigerio et al., 2009; Roussos et al., 2001); 3) there will be significant gender differences between mental health problems, with girls

scoring higher on Internalizing problems and boys scoring higher on Externalizing problems, and there would be a significant age differences between mental health problems, with older adolescents scoring higher than younger on both Internalizing and Externalizing problems (Gender and age differences were hypothesized based on the study conducted in Greece, as Greece is a country similar to Cyprus (Roussos et al., 2001); 4) As attachment, communication and functioning is found to be significantly associated with mental health problems (Levin & Currie, 2010; Muris et al., 2003; Theobald & Farrington, 2012), it is expected that all three family factors will predict adolescent mental health problems; 5) there will be significant gender and age differences between family factors.

5.3. Methods

5.3.1. Design

This is a *cross-sectional survey* that aims to look for relationships between adolescents' psychopathology and family factors in Cypriot community setting. Participants completed a set of self-report questionnaires that was related to the variables of interest.

5.3.2. Participants

A total of *645 adolescents* participated in this study. Data from 33 participants was excluded because they had more than eight missing responses to the items on each scale and with the same response circled throughout the whole questionnaire; this is in accordance to the guidelines proposed by the authors of the scales (i.e. YSR, IPPA and

FACES) used in this study. After employing data screening methods, including missing value analysis and outlier check (n=8), 604 cases remained and were used for the final analysis. 271 of these participants were boys and 333 were girls. Participants ranged in age from 12 to 17 years (M=15, SD =1.4).

Table 5.1: Demographics of adolescents in Study 1 (N=604)

	Boys n (%) (n=271)	**Girls** n (%) (n=333)
Age		
12-14 years	79 (29.2%)	115 (34.5%)
15-17 years	192 (70.8%)	218 (65.5%)
Live with		
Biological mother and biological father	249 (91.9%)	291 (87.4%)
Only mother	15 (5.%)	23 (6.9%)
Only father	0 (0%)	2 (0.6%)
Biological mother and guardian	4 (1.5%)	14 (4.2%)
Biological father and guardian	1 (0.4%)	1 (0.3%)
Other	2 (0.7%2)	2 (0.6%)
District		
Nicosia	56 (20.7%)	71 (21.3%)
Limassol	78 (28.8%)	99 (29.7%)
Larnaca	46 (17%)	102 (30.6%)
Paphos	23 (8.5%)	31 (9.3%)
Famagusta	65 (25.1)	30 (9%)

5.3.3. Procedure

Adolescents were recruited from 20 schools (10 junior high and 10 senior high schools) in Cyprus. Junior high schools represent the Lower cycle of the Public Secondary Education for adolescents between the ages of 12 and 14, whereas the senior high schools represent the Upper cycle of the Secondary Education and offer a three-year program for older students aged from 15 to 17 years old. The schools were from all five main districts in Cyprus (Nicosia, Limassol, Larnaca, Paphos and Famagusta), including both urban and rural areas, making the sample representative of the adolescent population of Cyprus. Schools were randomly selected and the participants were randomly drawn from each school.

Before collecting the data, permission was obtained from the University of Roehampton Ethics Board (Appendix I), the Ministry of Education and Culture (Appendix II) and the Cyprus National Bioethics Committee (Appendix III). The participants were briefly informed about the purpose of the present study in a letter, given by their teacher, which also included a screen with information about the survey (Appendix V) and consent form for the participants and the parents (Appendices VI, VII, VIII, IX). Only adolescents who have given to the researcher (CD), prior to completion of the questionnaire, both their consent and the written consent of their parents to participate in this study were allowed to do so. The questionnaires were administered by the researcher (CD) in a designated room in the participating schools to allow independent answering of the questionnaires, and to answer any questions that the adolescents may have. The questionnaires were answered anonymously. A debrief form (Appendix X) was given to the participants at the end of the study. The participants had the right to withdraw at any time.

5.3.4. Instruments

A demographic information form (Appendix XIII.1), including questions on gender, age, living with parents or other guardians, family structure, religion, ethnicity, the area where they live, their father's and mother's employment status, their father's and mother's level of education, their experience of any problems during the past 12 months, was given to participants.

Emotional and behavioural problems were assessed using Youth Self-Report (YSR; Appendix XIII.3), while family factors such as family attachment, family functioning, family communication and family satisfaction were assessed by using Family Adaptability and Cohesion Evaluation Scale (FACES; Appendix XIII.6) and Inventory of Parent and Peer Attachment (IPPA; Appendix XIII.7) (measures described in detail in Chapter 4, Section 4.5.1).

Table 5.2: Measures used in this Chapter/Study 1

Instrument	What measures	Number of items	Reference	Cronbach's α
Demographic Information	Socio-demographic Information	14	New	
YSR	Withdrawn and Anxious symptoms, Somatic Complaints, Social, Thought and Attention problems, Delinquent and Aggressive Behaviour	113	Achenbach (1991b)	0.84
IPPA – parent's scale	Attachment (Trust, Communication, Alienation)	26	Armsden & Greenberg (1987)	0.72
FACES	Family Functioning (Cohesion, Flexibility, Disengagement, Enmeshed, Chaotic and Rigid environment) and Family Communication	62	Olson (2011)	0.76

5.3.5. Statistical Analysis

The SPSS 19 software programme was used to conduct the analyses. Prior to data analysis, data was screened for missing values, outliers and normality of distribution. *Bivariate/multivariate data cleaning* (Tabachnick & Fidell, 2001) was implemented after excluding 33 questionnaires, with more than eight missing responses to the items of each scale and with the same response circled throughout the whole questionnaire. In accordance with Osborne and Waters (2002) who argued that the removal of the univariate and bivariate outliers could improve the accuracy of evaluations and reduce the probability of Type I and Type II errors, an additional 8 extreme outliers were removed. Hence, 604 data samples were left for the main analysis.

A *Kolmogorov Smirnov (KS) test* was implemented for checking the normality of data distribution. The KS test was significant for almost all variables and thus the assumption of normality of distribution for these variables could not be confirmed. However, as none of the variables are higher or lower ±3 (Stevens, 2002) (Appendix XXII) and the sample size is large enough and provides a power analysis, a decision was made to continue with parametric tests.

The following tests were used to analyze the data: a) Descriptive statistics and *cut off points of the YSR scale* were calculated in order to explore the prevalence rates of mental health problems among the population. Two approaches can be used to summarise the results obtained from the YSR questionnaire. The first approach uses the mean scores on each scale. This approach provides an easy comparison between different populations as it compares the number of problems scores by the sample groups (This approach was used in sections 5.4.2 and 5.4.3 in order to compare gender and age differences on YSR as well as in Chapter 6 (Section 6.4.2) in order to compare

YSR scores between adolescents from clinical and community settings). The disadvantage is that the number of items comprising each scale varies. As a result, it is difficult to compare mean scores across different scales, thus no such a comparison was made. The second approach includes the recommendation of cut-offs that can be used to identify the number of children in a population who are scoring in the clinical range on each checklist scale. Cut-off scores were calculated on the basis of Achenbach's suggestion (1991b) that the clinical range should be above a *T score* of 69 for problem scales and on the broader Internalizing and Externalizing scales, as well as on the total problem scores, the clinical range comprises *T scores* higher than 63. These cut-off points were also supported by Achenbach et al. (2002) when they compared 10 years of the use of YSR in assessing emotional and behavioural problems. The purpose of calculating a cut-off score is to give a description of the frequency and the distribution. Accordingly, cut-off score could allow us to statistically classify adolescents scoring below or above a given scale, as normal or pathological, respectively (This approach was used in Section 5.4.1 and Section 6.4.1 in order to obtain prevalence rates of adolescent mental health problems).

b) *Separate univariate and multivariate analyses* were performed in order to inform about gender and age differences with regard to mental health problems and to family factors. Before running the tests, the assumptions of MANOVA were considered.

c) Several *multiple regressions* were conducted in order to examine which family factors (family attachment, family communication and family functioning) predict adolescent mental health problems. For the purposes of this analysis, the distinction of Internalizing and Externalizing problems was used instead of assessing

each mental health problem individually. This was done, as there was not enough data to assess regression among many variables.

5.3.5.1. Checking for assumptions of the tests used in this Chapter / Study 1

Assumptions of MANOVA: Considering the assumptions of *independence of observation* and *random sampling*, the sample size is large enough and randomly collected to prove that this assumption is not violated. Considering the assumption of *multivariate normality*, according to Stevens (2002), if all variables meet univariate and bivariate normality, multivariate normality can be assumed as not violated. In this respect, this assumption is not violated. Considering *homogeneity of variance-covariance matrices*, Levene's Test for each dependent variable and the Box's M Test of Equality of Covariance Matrices were conducted. As a preliminary check, Levene's test was not significant for any of the dependent variables. Additionally, the result of the Box's M test was found significant (Box's M test=102.66, p=0.005) indicating that the matrices were not the same and that this assumption was violated. However, as Tabachnick and Fidell (2007) have suggested, large samples produce greater variances and covariances and therefore the probability values will be conservative and so significant findings can be trusted. This results in the homogeneity of variance-covariance matrices showed that Pillai's Trace Test should be taken in consideration in order to examine the analysis, since the Box's M test was violated.

Assumptions of Multiple Regression: Considering *independence of observation*, random selection was used in this study; therefore this assumption is not violated. Considering *independence of errors*, a Durbin-Watson test was used to check this

assumption. According to Stevens (2002), the Durbin-Watson value should be between 1.5 and 2.5 for independent observation. The result of the Durbin-Watson was lower than 2.5 in all multiple regression analyses, showing that this assumption was not violated. Considering *Linearity*, Q-Q plots were performed and found that linearity assumption was not violated. Assumption of *homoscedasticity* was visually checked by a scatterplot of the standardized residual (errors) and found that this assumption was not violated. Finally, *multicollinearity* was checked by conducting Pearson correlations. As a rule, Tolerance and VIF values were assessed and results indicated that none of them had a Tolerance value below 0.2 and VIF values were all well below 10 (Field, 2009). In addition, intercorrelation among predictors above .80 signals a problem (Jacop, 1969), and variables with a correlation above .08 should be eliminated from the regression model. In respect, the Cohesion Score and Flexibility Score, Parental Trust and Parental Communication variables were excluded from the regression models (Table 5.4).

Table 5.3: Pearson's Correlations coefficients between predictors in Study 1 (N=604)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Balanced Cohesion	-													
2. Balanced Flexibility	.71***	-												
3. Disengaged	-.25***	-.19***	-											
4. Enmeshed	.10*	.15***	.39***	-										
5. Rigid	.30***	.39***	.23***	.50***	-									
6. Chaotic	-.11**	-.09*	.58***	.43***	.23***	-								
7. Cohesion Score	**.93****	.69***	-.47***	.24***	.31***	-.18***	-							
8. Flexibility Score	.54***	**.81****	-.00	.14***	.04	.32***	.48***	-						
9. Satisfaction	.46***	.42***	-.39***	.01	.09*	-.21***	.52***	.28***	-					
10.Communication	.62***	.59***	-.40***	-.01	.18***	-.25***	.65***	.40***	.55***	-				
11. Parental Attachment	.47***	.44***	-.21***	.15***	.25***	-.01	.51***	.34***	.46***	.46***	-			
12. Parental Trust	.54***	.51***	-.39***	.04	.16***	-.17***	.60***	.37***	.54***	.57***	**.82****	-		
13. Parental Communication	.47***	.43***	-.40***	.00	.13**	-.24***	.53***	.26***	.50***	.50***	**.80****	.74***	-	
14. Parental Alienation	-.28***	-.25***	.48***	.21***	.11**	.41***	-.35***	-.11**	-.33***	-.37***	-.02	-.47***	-.50***	-

Note: The values that are in bold are those that have been removed from the regression model as they have a correlation higher than .80

5.4. Results

5.4.1. Prevalence of Adolescent Mental Health Problems

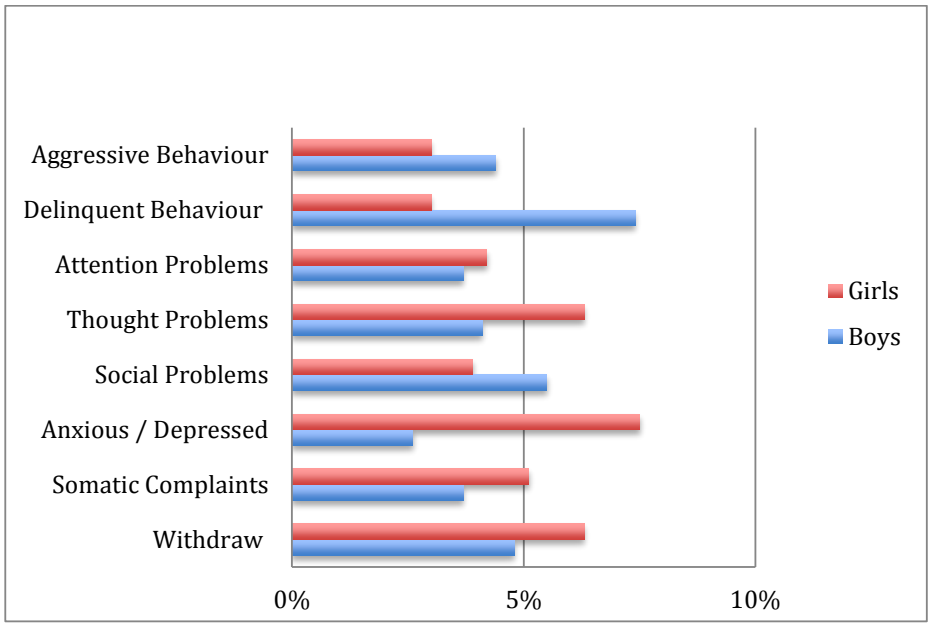
For the group of adolescents as a whole, the mean score for total emotional and behavioural problems, 40.36 (SD=20.98), falls within the normal range and well below the range suggestive of clinical concern (64-100) (Achenbach, 1991b). However, 11.4% of the adolescents had scores indicating a risk of mental health problems or enough symptoms to warrant substantial clinical concern. With regard to the broader categories of the YSR, 11.4% of the adolescents had scores indicating a risk of Internalizing problems and 11.1% of Externalizing problems. Of all the YSR syndromes, the most common mental health problem among Cypriot adolescents was Withdrawn Syndrome (5.6%), followed by Anxiety/Depressed Syndrome (5.3%) and Thought Problems (5.3%). Delinquent Behaviour had also high prevalence rate (5%) compared with other syndromes. In contrast, Aggressive Behaviour was found to be the least common problem among Cypriot adolescents (3.6%) (Table 5.5).

Table 5.4: Prevalence rates of Cypriot adolescent mental health problems (N=604)

YSR Syndromes	**Total** n (%)
Internalizing Problems	69 (11.4%)
Withdrawn	34 (5.6%)
Somatic Complaints	27 (4.5 %)
Anxious / Depressed	32 (5.3%)
Externalizing Problems	67 (11.1%)
Delinquent Behaviour	30 (5%)
Aggressive Behaviour	22 (3.6%)
Social Problems	28 (4.6%)
Thought Problems	32 (5.3%)
Attention Problems	24 (4%)
Total Problems	69 (11.4%)

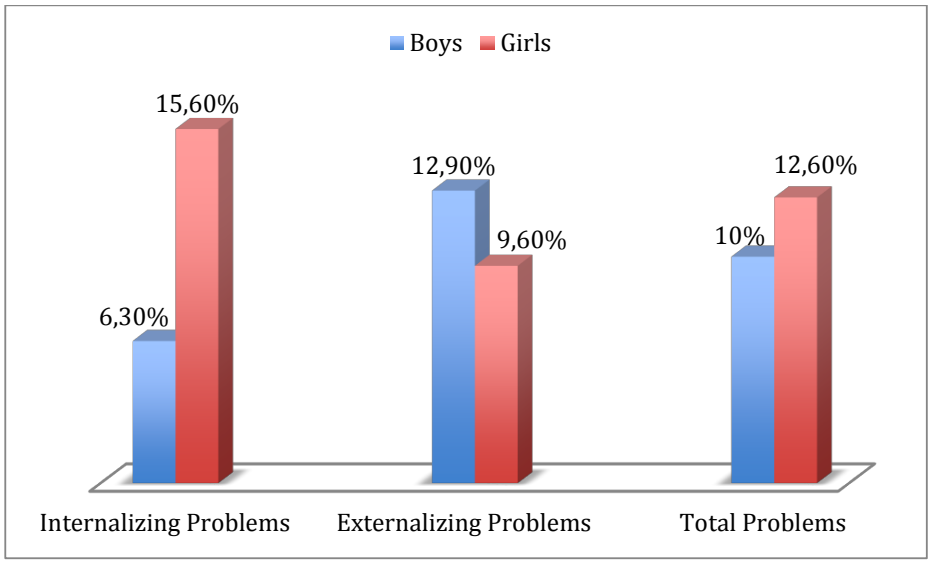
Cut-off scores of each YSR syndromes were also calculated by gender (Figure 5.1). Results revealed that girls had higher prevalence rates on Withdrawn, Somatic Complaints, Anxious/Depressed, Thought and Attention Problems syndromes, compared to boys. In contrast, boys experience more social problems, delinquent and aggressive behaviour than girls. In addition, the most common mental health problem among girls was anxiety and depression, while among boys it was delinquent behaviour.

Figure 5.1: Prevalence of YSR syndrome based on adolescents' gender



Results from the analysis of the broader categories of YSR indicated that girls had a higher percentage on Internalizing problems, compared to boys, while boys had a higher percentage on Externalizing problems compared to girls. With regard to the overall Total problem scores, 12.6% of girls warranted substantial clinical concern compared to boys who indicated 10% (Figure 5.2).

Figure 5.2: Prevalence of YSR broader categories and total problem scale based on adolescents' gender



5.4.2. Gender Effect on Adolescent Mental Health Problems

In order to explore further whether there is a significant difference between gender and mental health problems, Multivariate Analysis of Variance (MANOVA) was conducted. Gender was used as an independent variable whereas mental health problems were used as dependent variables. Since the Box's M test was found significant, indicating that the homogeneity of variance/covariance matrices assumption was violated, Pillai's Trace (V) was taken into account while considering the results.

In this respect, the multivariate analysis of variance revealed a significant main effect of gender, (V = .18; $F_{3,590}$ = 14.41, p < .001, η^2 = .18). As a significant effect of gender was found on the YSR syndromes, follow-up univariate tests on each emotional and behavioural problem were conducted (Table 5.6).

Table 5.5: Gender effect on adolescents YSR syndromes

YSR Syndromes	Boys n = 271		Girls n = 333				
	Mean	SD	Mean	SD	F	p	η^2
Internalizing Problems	10.00	7.72	13.54	8.38	28.62	.00***	.05
Withdrawn	2.60	3.34	3.14	2.45	7.49	.01*	.01
Somatic Complaints	1.93	2.36	2.92	2.49	24.57	.00***	.04
Anxious / Depressed	5.46	4.22	7.48	4.85	29.07	.00***	.05
Externalizing Problems	12.38	7.87	11.96	6.88	.50	.48	.00
Delinquent Behaviour	3.59	2.85	2.69	2.49	17.08	.00***	.03
Aggressive Behaviour	8.80	5.61	9.27	4.97	1.22	.27	.00
Social Problems	2.51	2.10	2.32	1.91	1.33	.25	.00
Thought Problems	2.29	2.19	2.25	2.24	.06	.82	.00
Attention Problems	4.39	2.92	4.94	2.90	5.30	.02*	.01
Total YSR Problems	38.70	22.02	41.72	21.89	2.82	.09	.01

*p< .05 , **p< .01 , ***p< .001

ANOVAs revealed significant gender effect on Withdrawn, Somatic Complaints, Anxious/Depressed, Attention Problems, Delinquent Behaviour and on Internalizing Problems. Boys reported significantly more delinquent behaviour than girls, while girls experienced significantly more withdrawal problems, somatic complaints, anxious/depressed symptoms, attention problems and Internalizing problems. No significant gender differences were found on Externalizing and Total YSR problems. The effect size was small for all variables.

5.4.3. Age Effect on Adolescent Mental Health Problems

In order to make comparisons between age, the sample is divided into two age groups: a lower age group of 12-14 years and a higher age group of 15-17 years. This division was made according to the Cypriot education system. Cypriot secondary education offers two three-year cycles of education – Junior High School (lower

secondary education) and Senior High School (upper secondary education). Adolescents from 12 to 14 years old attend junior high school and at the age of 15 they change into senior high school. Therefore, the fact that adolescents change social environment at the age of 15 and are transferred into new schools was seen as an appropriate reason for dividing age into these two age groups. The MANOVAs (Pillai's trace), with age being the independent variable and mental health problems being the dependent variables, revealed a significant age effect when YSR syndromes were compared in younger and older adolescents, with the older adolescents scoring higher, V = .04; $F_{9,594} = 2.96$, $p < .01$, $\eta^2 = .04$.

Each problem was examined using follow-up univariate ANOVAs (Table 5.7). The analyses revealed significant differences with respect to Withdrawn syndrome, Anxious/Depressed syndrome, Attention problems, Internalizing problems and Total Problems. Older adolescents scored significantly higher on these factors. The effect size was small for all variables.

Table 5.6: Age effect on adolescents YSR syndromes

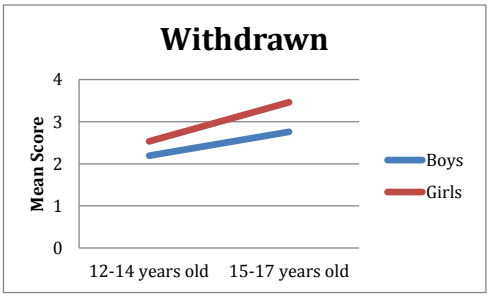
YSR Syndromes	**12–14 years old** n = 194		**15–17 years old** n = 410				
	Mean	SD	Mean	SD	F	p	η^2
Internalizing Problems	10.72	7.36	12.53	8.62	6.39	.01*	.01
Withdrawn	2.38	2.07	3.14	2.53	13.16	.00***	.02
Somatic Complaints	2.48	2.43	2.48	2.50	.00	.99	.00
Anxious / Depressed	5.86	4.22	6.92	4.85	6.87	.01*	.01
Externalizing Problems	11.86	7.40	12.29	7.31	.46	.50	.00
Delinquent Behaviour	3.06	2.78	3.10	2.66	.03	.86	.00
Aggressive Behaviour	8.79	5.19	9.19	5.30	.73	.39	.00
Social Problems	2.3	2.05	2.46	1.97	.87	.41	.00
Thought Problems	2.16	2.28	2.32	2.19	.68	.82	.00
Attention Problems	4.28	2.98	4.90	2.87	5.92	.02*	.01
Total YSR Problems	37.69	21.89	41.63	21.94	4.25	.04*	.01

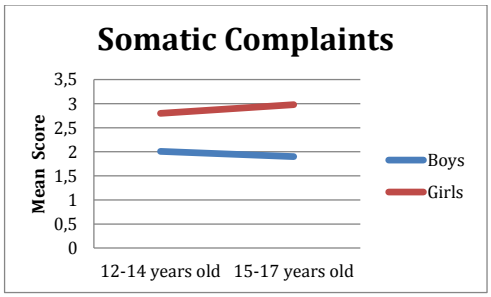
*p< .05 , **p< .01 , ***p< .001

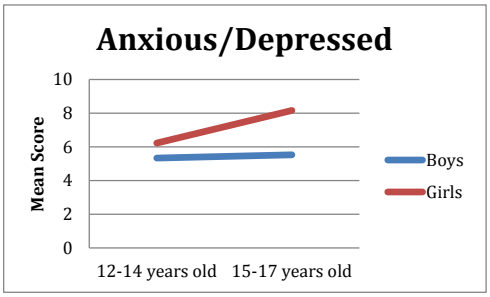
5.4.4. Combining Gender and Age Effects on Adolescent Mental Health Problems

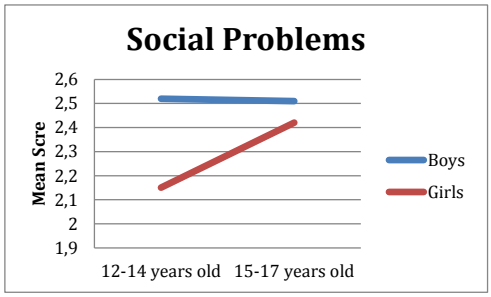
MANOVA revealed no gender and age effect on YSR syndromes when gender and age were combined, V = .02; $F_{9,592}$ = 1.07, p = .383, η^2 = .02. However, observing the mean scores of YSR scales, older girls had higher scores than younger girls in all YSR syndromes except Delinquent Behaviour. In contrast, older boys had higher scores than younger boys on Withdrawn, Thought Problems, Attention Problems, Delinquent Behaviour, Internalizing Problems, Externalizing Problems and Total scores, whereas younger boys had higher scores on Somatic Complaints, Social Problems and Aggressive Behaviour (Figures 5.3).

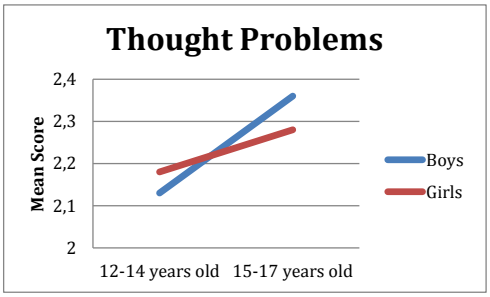
Figure 5.3: Means of adolescents' responses on each YSR scale by gender

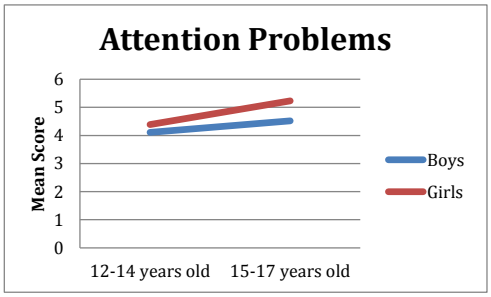


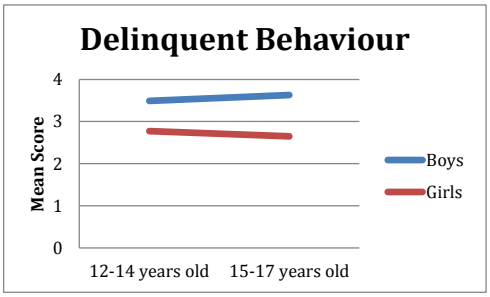


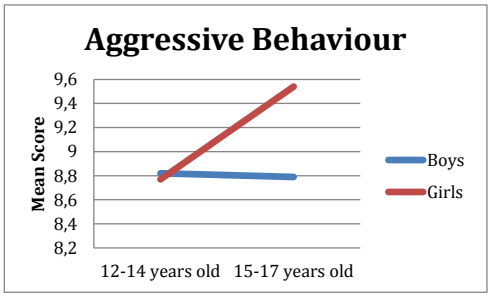

Anxious/Depressed
Mean Score
10
8
6
4
2
0
12-14 years old
15-17 years old
Boys
Girls

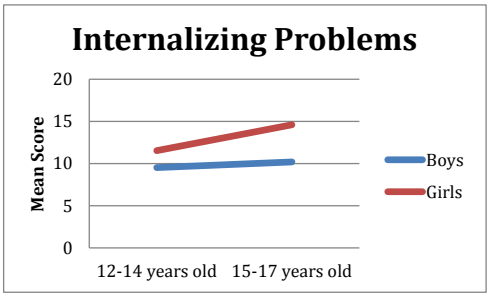

Social Problems
Mean Scre
2,6
2,5
2,4
2,3
2,2
2,1
2
1,9
12-14 years old
15-17 years old
Boys
Girls

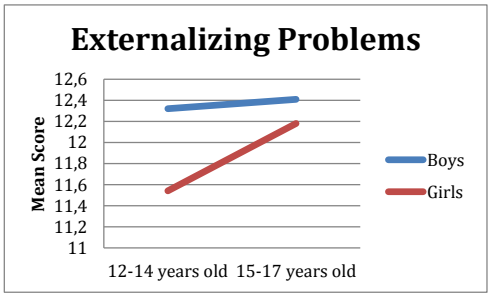

Thought Problems
Mean Score
2,4
2,3
2,2
2,1
2
12-14 years old
15-17 years old
Boys
Girls

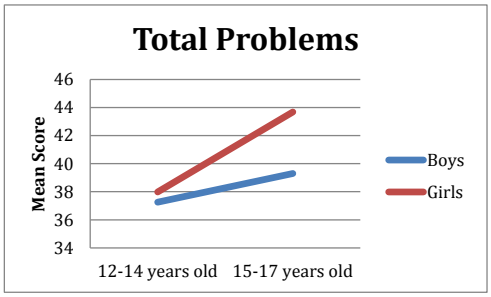

Attention Problems
Mean Score
6
5
4
3
2
1
0
12-14 years old
15-17 years old
Boys
Girls


Delinquent Behaviour
Mean Score
4
3
2
1
0
12-14 years old
15-17 years old
Boys
Girls


Aggressive Behaviour
Mean Score
9,6
9,4
9,2
9
8,8
8,6
8,4
8,2
12-14 years old
15-17 years old
Boys
Girls


Internalizing Problems
Mean Score
20
15
10
5
0
12-14 years old
15-17 years old
Boys
Girls


Externalizing Problems
Mean Score
12,6
12,4
12,2
12
11,8
11,6
11,4
11,2
11
12-14 years old
15-17 years old
Boys
Girls


Total Problems
Mean Score
46
44
42
40
38
36
34
12-14 years old
15-17 years old
Boys
Girls

5.4.5. Predictors of Emotional and Behavioural Problems

Another aim of this study was to determine the degree to which behavioural and emotional problems may be related to parental attachment, family communication, family satisfaction and family functioning. A multiple regression procedure was employed with YSR total problems used as the dependent variable of the equation (Table 5.8). From 604 cases, five had standardized residual above ±2.5, thus were removed. Multiple regression analysis partly supports the hypothesis that family attachment, family communication and family functioning predict mental health problems. Only total parental attachment, parental alienation and balanced cohesion were significant predictors of emotional and behavioural problems.

Table 5.7: Summary of multiple regression analysis for variables predicting YSR Total Problems (N=599)

Variable	B	SE B	β
Constant	14.99	7.31	
Parental attachment Variables			
Total parental attachment	-.26	.08	-.14**
Parental alienation	1.76	.13	.55***
Family functioning Variables			
Balanced Cohesion	.50	.23	.11*
Balanced Flexibility	-.08	.24	-.02
Disengaged	.18	.22	.04
Enmeshed	-.13	.24	-.02
Rigid	.26	.21	.05
Chaotic	.24	.20	.05
Family Satisfaction	-.54	.12	-.02
Family Communication variable	-.06	.12	-.02
R^2		.37	
F for Change in R^2		34.38***	

*p < .05, **p < .01, ***p < .001

However, balanced flexibility, disengaged, enmeshed, rigid, chaotic, family satisfaction and family communication were not significant predictors of developing mental health problems. Thus, only parental attachment, parental alienation and

balanced cohesion within a family environment can explain emotional and behavioural problems in adolescents (R^2 = .37), explaining 37% of the variations in the outcome variable. In addition, the greatest contribution was made by parental alienation (β = .55, $p < .5$). Adolescents who experience parental alienation, such as anger and interpersonal isolation, and who cannot balance emotional bonding with their family members were more likely to develop behavioural and emotional problems.

5.4.6. Predictors of Internalizing Problems

Multiple Regression was used to examine which family factors predict Internalizing problems. The Internalizing problems variable was used as the dependent variable (Table 5.9). From 604 cases, four had standardized residual above ±2.5, thus were removed.

Table 5.8: Summary of multiple regression analysis for variables predicting YSR Internalizing Problems (N=600)

Variable	B	SE B	β
Constant	-1.26	2.94	
Parental attachment Variables			
Total parental attachment	-.05	.03	-.06
Parental alienation	.69	.05	.55***
Family functioning Variables			
Balanced Cohesion	.26	.09	.15**
Balanced Flexibility	.04	.09	.02
Disengaged	.03	.09	.01
Enmeshed	-.20	.10	-.09*
Rigid	.04	.08	.02
Chaotic	.14	.08	.08
Family Satisfaction	-.03	.05	-.03
Family Communication variable	-.03	.05	-.03
R^2		.33	
F for Change in R^2		28.94***	

*p < .05, **p < .01, ***p < .001

Parental alienation, enmeshed and cohesion variables were found to be significant predictors of Internalizing problems in adolescents. In particular, parental alienation made the strongest contribution (β = .55, $p < .05$) following by balanced cohesion (β = .15, $p < .05$) and then by enmeshed (β = -.09, $p < .05$). These variables account for 33% of the variation in the experience of Internalizing problems (R^2 = .33). The linear combination of the family variables included was significantly related to Internalizing problems, $F_{11,599}$ = 28.94, p < .001. These results indicate that adolescents who experience alienated feelings from their parents, who are overly connected with them and who experience a lack of cohesion within the family environment are at risk of developing or are already experiencing Internalizing problems. No significant results were found in the family communication subscale and the remaining family functioning subscales.

5.4.7. Predictors of Externalizing Problems

From 604 cases inserted in the Multiple Regression Analysis, addressing predictors of YSR Externalizing problems, eight had standardized residual above ±2.5, thus were removed. Results from the Multiple Regression (Table 5.10) revealed that total parental attachment and parental alienation were the only significant predictors of Externalizing problems. These variables account for 23% of the variation in the experience of Externalizing problems (R^2 = .23), with parental alienation making the highest contribution (β = .43, $p < .05$) to the overall model. The linear combination of the family variables included was significantly related to Externalizing problems, $F_{11,595}$ = 17.25, p < .001.

Table 5.9: Summary of multiple regression analysis for variables predicting YSR Externalizing Problems (N=596)

Variable	B	SE B	B
Constant	5.80	2.64	
Parental attachment Variables			
Total parental attachment	-.08	.03	-.12**
Parental alienation	.44	.05	.43***
Family functioning Variables			
Balanced Cohesion	.07	.08	.05
Balanced Flexibility	-.05	.09	-.03
Disengaged	.12	.08	.08
Enmeshed	-.02	.09	-.01
Rigid	.07	.07	.04
Chaotic	.02	.07	.01
Family Satisfaction	-.04	.04	-.04
Family Communication variable	-.02	.05	-.02
R^2		.23	
F for Change in R^2		17.25***	

*p < .05, **p < .01, ***p < .000

These results showed that adolescents who experience a lack of attachment and specifically feelings of alienation from their parents also experience Externalizing problems. However, none of the remaining family factors (family functioning and family communication) were found to significantly predict Externalizing problems in adolescents.

5.4.8. Gender and Age Effects on Family Factors

The last step in the analyses was to examine gender and age differences (used as independent variables) on family attachment, communication and functioning (used as dependent variables).

MANOVA on IPPA Parent scale, revealed significant differences on both gender (V = .03; $F_{3,598}$ = 5.36, p < .001, η^2 = .03) and age (V = .03; $F_{3,598}$ = 6.28, p < .001, η^2 = .03) for overall Parental Attachment. Using univariate tests, ANOVA, as a follow-up analysis, there were significant gender differences on Communication, Trust and Total Parental Attachment subscales (Table 5.11). Girls scored significantly higher than boys on total Parental Attachment, Communication and Trust, indicating that girls are more attached to their parents compared to boys. With regard to age, none of the ANOVAs revealed significant differences between younger and older adolescents (Table 5.12).

Table 5.10: Gender effect on family factors

Family Factors	**Boys** n = 271		**Girls** n = 333				
	Mean	SD	Mean	SD	F	p	η^2
IPPA							
Total Parental Attachment	83.41	11.68	86.91	10.49	14.46	.00***	.02
Trust	35.06	7.13	36.48	7.04	6.51	.01*	.01
Communication	30.91	6.60	32.77	7.04	11.56	.00***	.02
Alienation	17.44	6.32	17.66	6.70	.58	.91	.00
FACES							
Cohesion Score	23.89	5.99	25.83	5.62	19.64	.00***	.03
Balanced Cohesion	23.47	5.11	25.40	4.13	28.13	.00***	.05
Disengaged	17.54	4.65	16.89	4.51	2.85	.09	.01
Enmeshed	18.38	3.89	17.75	3.44	1.90	.17	.00
Flexibility Score	21.39	4.69	23.01	3.80	24.76	.00***	.04
Balanced Flexibility	22.77	4.73	24.46	4.19	23.77	.00***	.04
Rigid	20.16	4.35	20.11	4.09	.03	.86	.00
Chaotic	17.39	4.65	17.23	4.44	0.21	.65	.01
Satisfaction	36.32	8.32	37.79	7.20	7.91	.01*	.01
Communication	35.02	7.65	37.62	7.76	19.45	.00***	.03

*p< .05 , **p< .01 , ***p< .001

Table 5.11: Age effect on family factors

Family Factors	**Younger** n = 194		**Older** n = 410				
	Mean	SD	Mean	SD	F	p	η^2
IPPA							
Total Parental Attachment	85.15	12.08	85.43	10.72	.33	.56	.00
Trust	35.43	7.69	36.04	6.82	1.46	.23	.00
Communication	32,79	6.97	31.53	6.84	3.07	.08	.01
Alienation	16.93	6.46	17.86	6.55	2.23	.14	.00
FACES							
Cohesion Score	24.25	6.13	25.30	5.71	6.23	.01*	.01
Balanced Cohesion	23.76	4.91	24.90	4.54	10.82	.00***	.02
Disengaged	17.49	4.59	17.03	4.58	1.59	.21	.00
Enmeshed	18.48	3.69	17.82	3.63	3.73	.05*	.01
Flexibility Score	21.83	4.57	22.50	4.15	5.16	.03*	.01
Balanced Flexibility	23.34	5.18	23.87	4.16	3.29	.07	.01
Rigid	20.53	4.42	19.95	4.09	2.40	.12	.00
Chaotic	17.50	4.62	17.20	4.49	.58	.44	.00
Satisfaction	36.84	8.12	37.27	5.58	1.01	.32	.00
Communication	35.44	8.70	36.94	7.81	6.90	.01*	.01

*p< .05 , **p< .01 , ***p< .001

MANOVA analysis on FACES subscales showed significant main effect of gender (V = .07; $F_{8,593}$ = 5.26, p < .001, η^2 = .07) and age (V = .04; $F_{8,593}$ = 2.79, p < .01, η^2 = .04) on overall family functioning. Follow-up univariate tests, ANOVA, showed that girls indicated significantly higher scores on Cohesion, Flexibility and Satisfaction than boys. There was no significant difference between gender and the Disengaged, Enmeshed, Rigid, and Chaotic subscales. Univariate follow-up ANOVAs on age were found to have significant effects on the Cohesion, Flexibility and Enmeshed, subscales and non-significant effects on the Satisfaction, Disengaged, Rigid and Chaotic subscales. While on the Cohesion and subscales older adolescents had significantly higher scores than younger ones, on the Satisfaction subscale younger adolescents had significantly higher scores than those in the older group. These results

indicate that girls experience better family functioning than boys, and that older adolescents experience family functioning better than those in the younger group.

In addition, ANOVAs revealed that girls compared to boys and older adolescents compared to younger ones had significantly higher scores on Family Communication. These results indicate that while girls have better communication with their parents than boys, older adolescents have better communication than younger adolescents.

5.5. Discussion

The main aims of this study were, first, to explore the frequency of mental health problems among Cypriot adolescents, aged 12 to 17 years old, from a community setting and, second, to investigate the association between family factors and mental health problems. To sum up, firstly, the finding from this study indicates that 11.4% of adolescents from community setting are reported as having significant emotional and behavioural problems. The current findings support those of previous studies, as the prevalence of 11.4% is in line with findings from other countries. For example, the prevalence of total emotional and behavioural problems, based on the use of YSR, has been reported to range from 9.8% to 30.4%, including community samples from Italy, Switzerland, Australia and India (Frigerio, et al., 2009; Pathak et al., 2011; Sawyer, et al., 2008; Verhulst, Achenback, Van der Ende, Erol, Lambert, Leug, et al., 2003). In support, our prevalence range fits closer to the lower end of this range (refer to Table 2.1, Chapter 2, p. 27), which belongs to Italy (Frigerio, et al., 2009), compared to the higher prevalence, which belongs to India (Pathak et al., 2011). As Cypriot culture is closer to Italian than to Indian, this fit is somehow expected. For example, when

Bradshaw, Hoelscher and Richardson (2007) compared adolescents' wellbeing in the European Union, they found that Cypriot and Italian adolescents feel safer towards their local environments compared to other countries, and this has a significant impact in their wellbeing. This is because both Cyprus and Italy have smaller local populations compared to other countries and consequently, found to have low prevalence rates on overcrowding environment and house holding problems. In addition, Bradshaw, et al. 2007) also argued that both Cypriot and Italian adolescents have better relationships with their parents compared to other countries. That is due to the fact that as they keep traditions, like eating together with their parents.

Furthermore, differences between countries in mental health problems may be due to differences in the expression of symptoms, as well as culturally related differences in the willingness to report illness. For example, Rescorla et al. (2007) found that in Asian cultures, people are concerned with their self-presentation and are more prone to admit common symptoms than to report severe psychiatric symptoms. Thus, this tendency may account for the scores of the YSR. However, if as likely, this pattern reflects cultural rather than methodological factors related to the present study, further investigation into the possible explanation for the low mental health rate observed in Cypriot adolescents from community setting would be of considerable interest to both policy makers and clinicians.

In addition, criticism should also be made of the use of cut-off scores used in this study, as it may explain the difference between the prevalence rates of our sample and samples from other countries. On the one hand, the cut-off points used in this study were developed by Achenbach in an American sample. This could be problematic, as cultural differences that impact scoring YSR (Rescorla, et al., 2007) may occur between

Cypriot and American samples. On the other hand, using a cut-off score is beneficial as it allows counting adolescents' symptomatology, thus offering prevalence rates that would be of considerable interest to both policy makers and health services. Consequently, further consideration of conducting a study evaluating YSR cut-off scores in the Cypriot population could help explore more accurate prevalence rates of adolescents' mental health problems in Cyprus.

Previous research showed that anxiety is the most common mental health problem among adolescents from other Mediterranean countries, such as Greece (Roussos, et al., 2001) and Italy (Frigerio et al., 2009). This study did not support this. In contrast, it is found that the most common mental health problem among adolescents was withdrawal. However, withdrawal symptoms may be explained by high prevalence rates of bullying and victimization among Cypriot adolescents. In a study by Stavrinides, Paradeisiotou, Tziogouros and Lazarou (2010) results revealed that 17% of Cypriot adolescents are involved in some form of bullying and victimization. They also found that one in two students feel threaten about bullying, as they believe that a classmate of theirs has been physically bullied. As argued by the authors, this prevalence found to be in line with previous research that followed same protocols and procedures such as Olweus (1993). In support, as found in a Tsiantis' study (2010) bullying had a significant psychosocial impact in adolescents. Adolescents, who are involved in bullying and victimization, are characterized by withdrawal symptoms, school refusal, depression, secretiveness, and are involved in less social activities. However, as there are limited epidemiological studies on bullying in Cyprus and as the present study cannot give a clear answer on the association between withdrawal symptoms and bullying, further research should be conducted.

Secondly, adolescent mental health problems are not equally evident among gender. Although girls scored higher than boys in the Total Problem score of YSR, this difference was found not to be significant. This comes in contrast with the hypothesis. Multicultural comparison studies usually show significant differences in total emotional and behavioural problems, with girls scoring higher (Achenbach, 1991b; Roussos, Francis, Zoubou, Kiprianos, Prokopiou, & Richardos, 2001; Sandoval, et al., 2006; Verhulst, et al., 2003). However, there is a trend that girls had higher scores on the total YSR problems, although it is not clear why this is the case. One explanation of this may be the fact that young women in societies such as Cyprus face the notion of patriarchy. Patriarchy in Cyprus is a prevalent model of gender reproduction where adolescents articulate gendered stereotypes in a way that serves to maintain male privilege and female subordination and men hold authority over women (Skapouli, 2009). This notion subjects that there are severe consequences of patriarchy among girls, as they experience distress because they hold their need of independency and autonomy, (Skapouli, 2009), thus they are also more vulnerable to experiencing mental health problems.

The results of gender differences in both Internalizing and Externalizing problems are in line with a study by Lee and Stone (2012), which illustrated that boys experience more Externalizing problems while girls experience more Internalizing problems. Significant gender differences found in Internalizing problems may be related to the fact that girls are more vulnerable and react emotionally to stressful events involving others and give more attention to their emotions compared with boys (Zahn-Wexler, Klimes-Dougan, & Slattery, 2000). As found by Chaplin and Aldao (2013), feelings of shame and guilt, that were mostly experienced by adolescent girls rather than boys, were found to be significant predictors of several psychological problems,

including depression, anxiety and self-harm. In contrast, boys felt more joy than girls when they were given the opportunity to tease another individual, an indication that could increase the risk of these boys engaging in bullying and aggressive behaviour.

In contrast, no significant gender differences were found in Externalizing problems, even though boys scored higher than girls. This comes in contrast with previous research, which argued that boys are disproportionately represented among seriously aggressive children and young people (Moffitt, Caspi, Rutter & Silva, 2001). However, there is no total agreement about that, as there is evidence showing that much aggression in girls has been overlooked because it is in a different form from that of boys (Crick, 1996). Girls are more likely to use 'relational aggression', that is, verbal and indirect aggression, such as, alienation, ostracism, character defamation and gossip (Crick, 1996). One study found the bullying in school is associated with aggression and affects more girls rather than boys (Pepler & Craig, 1995). This could explain this finding, considering that bullying is a big social problem among Cypriot adolescents (Stavrinides, et al., 2010).

In addition, there is also evidence that both boys and girls report fairly high rates of physical aggression with their siblings, which is, therefore, not necessarily seen as a form as maladjustment (Dunn, 1993). Paquette and Underwood (1999) illustrated that both social and physical aggression were equally evident in both boys and girls. However, they also found that girls thought about aggression more than boys and were more distressed about it than were boys. In a more recent study, Prinstein and La Greca (2004) argued that aggressive behaviours are associated with substance use; a relationship that affects more boys than girls. Therefore, no difference between boys

and girls on externalizing problems could be explained by girls' attitudes towards aggressive behaviours.

Despite gender differences, results showed that there is an increase in both Internalizing and Externalizing problems, even though no significant age difference was found regarding Externalizing problems. In addition, both older boys and girls (aged 15-17 years old) were found to experience more mental health problems than younger ones (12-14 years). Because the trajectory of emotional expression changes as children mature, they may display a wide range of emotions as they develop. This finding partly supports previous research. In most previous studies, findings have indicated that there is a consistent trend towards increased total emotional and behavioural problems as well as Internalizing problems (Lee & Bukowski, 2012; Sandoval, et al., 2006; Venhulst, et al., 2003) and decreased Externalizing problems (Bongers et al., 2003) with age.

The fact that older adolescents, and especially girls, had higher scores in Externalizing problems than younger ones was not expected. This finding comes in contrast with prior studies which used the YSR scale in this age range (Leve, Kim, & Pears, 2005) and found that Externalizing behaviour is likely to be more overt during early childhood but more covert during late adolescence (Lacourse Cote, Nagin, Vitaro, Brendgen, & Tremblay, 2002). One explanation of these findings may be the fact that Cypriot girls go through hormonal and physical development around the age of 9, earlier than boys. They experience puberty earlier and therefore they are sexually more mature than boys (Mendle, Turkheimer, & Emery, 2007). It could be, as argued by Danubio, De Simone, Vecchi, Amicone, Altobelli and Gruppioni, (2004), that pubertal development in Mediterranean countries is at a more advanced stage compared with other countries. Additionally, in his book, Bancroft (2009) stated that young people

from Mediterranean countries tend to reach puberty at an earlier age than those come from Northern or Southern countries because of their nutrition. For example, the fact that Mediterranean diet is high in energy and macronutrients can affect puberty during adolescents, as adequate intakes of energy and macronutrients have essential roles in growth including muscle and brain development (Tornaritis, Philippou, Hadjigeorgiou, Kourides, Panayi, & Savva, 2014). Early puberty maturation has also be found to link to higher rates of aggressive and delinquent behaviours among girls because, as stated by Lynne et al. (2007), girls' mature image cause problems in the way peers and adults treat them, and thus they use aggressive reactions as a way of protection.

Another possible reason for the age differences and the increase in mental health problems is that possible behavioural problem among girls might be associated with their school transition as 14 and 15 is the age at which children move from Junior to Senior High School in Cyprus. Although both boys and girls experience this transition, Senior High is more demanding than Junior High, which could cause students stress and anxiety. This finding support previous research which showed that school transition is found to be a stressful event for adolescent, as stressors around the school transition predicted both depression and externalizing problems (Robinson, Garber, & Hilsman, 1995). School transition is a critical issue in adolescence. How well the school environment fits the needs of adolescents is an influential factor in the shaping of their mental health. Adolescents typically enter their senior high years at a time of heightened self-focus where they bring with them a rising desire for self-determination, and they view peer relationships as important (Eccles, Midgely, Wigfield, Buchanan, Reuman, Flanagan, & Mac Iver, 1993). In support, Hines (2007) argued that girls are struggling more to cope with school transition than boys as they are less adjusted to making friends than boys. Thus, as this study's findings showed that girls had significantly

higher scores on Internalizing problems, it could be concluded that they are struggling more to overcome stressful experiences, which cause them more emotional and behavioural problems during Senior High School compared to boys.

Thirdly, results of this study provided some support for the notion that family impacts adolescent mental health problems (Lee & Bukowski, 2012; Kenny, Dooley, & Fitzgerald, 2013). This finding supports previous research which has shown that Internalizing and Externalizing problems are influenced by the family environment (Muris, et al., 2003). The only factor found to significantly predict adolescents' mental health problems is attachment. This finding is in line with conclusions from previous research, which stated that a lack of trust and communication, especially between adolescents and their parents, and low levels of attachment is found to be associated with behavioural problems and negative well-being in adolescents (Ackard, Neumark-Sztainer, Story, & Perry, 2006; Fanti, Henrich, Brookmeyer, & Kuperminc, 2008).

In addition, this study is found that adolescents who experience anger and interpersonal isolation from their parents are more vulnerable to developing Internalizing problems. This finding is supported by previous research that concluded that the experiences of insecure attachment, such as parental alienation, leads to higher risk of suffering from anxiety and depression (Muris et al., 2003).

In terms of Externalizing problems, attachment was found to significantly predict these problems. The association between attachment and Externalizing problems is similar with other studies, which have identified the impact of parental attachment on the development of Externalizing behavioural problems in adolescents, such as aggressive behaviour (Gallarin & Alonso-Arbiol, 2012; Keijsers et al., 2012). Adolescents, who characterized their relationships with their parents as alienated and

lacking communication and trust, are likely to demonstrate their dissatisfaction of these relationships through delinquent and aggressive behavior. In addition, as argued by Buist, Dekovic, Meeus, and van Aken (2004) these problems in turn seem to have a negative effect on the adolescent's perception of his/her relationship with parents. However, as this study fails to show the direction of the association between attachment and adolescent mental health problems, it would be useful to examine the reciprocal relationship between attachment and adolescents' Internalizing and Externalizing problems in future studies.

Even though attachment is found to predict both Internalizing and Externalizing problems, there is a debate in the literature about whether or not attachment has more impact on one of the two behavioural problems. On the one hand, there are observations of insecurely attached children who display marked aggression and conduct problems but no symptoms of depression or anxiety (Hanson & Spratt, 2000), and on the other hand there are studies indicating that attachment plays a more important role in Internalizing than Externalizing problems (Muris, et al., 2003). On the basis of these findings, it is tempting to conclude that attachment plays a more important role in Internalizing than in Externalizing symptoms. This is based on the finding that, while girls experience more Internalizing problems than boys, they are also found to be more attached to their parents, suggesting that they place more value on their attachment figures.

In partial support of the hypothesis, family functioning did not significantly predict adolescents' emotional and behavioral problems, except for cohesion and enmeshed which were found to predict Internalizing problems. On the one hand, these findings are inconsistent with previous findings which suggested that patterns of family

functioning such as disengagement predicted adolescent mental health problems (Barber, 1996**;** Theobald & Farrington, 2012). On the other hand, the fact that only the Cohesion and Enmeshed subscales of family functioning were found to predict Internalizing problems gives some support to previous findings which argued that the dimensions of family functioning, including Cohesion, Adaptability, Rigidity and Discord, are linked to adolescent psychopathology (Lai Kwok, & Shek, 2009).

The role of family cohesion on adolescent wellbeing has been found to be inconsistent. For example, in a study by Lai et al. (2009), low levels of family cohesion were positively related to suicidal ideation and depression. A study by Burke, Brennan and Cann (2012), on the other hand, has indicated that cohesion tends to act as a protective factor for adolescent mental health problems. This unexpected finding could be related to the fact that, in Cyprus, family members have strong bonds between them and parents are involved in their children's lives. However, due to the independence of the children, especially boys, in Cypriot families, young people did not usually turn to their parents for guidance and support, and thus they may internalize their problems. This could be the reason why family functioning did not predict adolescents' emotional and behavioural problems.

In contrast to the hypothesis, family communication did not predict any emotional and behaviour problems in adolescents. This finding comes in contrast to previous research that indicated an association between family communication and adolescent mental health (Youngblade et al., 2007). The fact that communication did not predict adolescent mental health problems was an unexpected finding if we consider the fact that there were gender and age differences on the family communication scale. As these findings showed, girls who are more attached to their parents and more

vulnerable to mental health problems also communicate more with their parents compared to boys. This finding replicates previous research, which showed that girls communicate more with both parents than boys (Noller, & Callan, 1991).

There are significant gender differences on adolescents' styles of expressions and communication. Boys want to control a conversation without displaying dominance and expertise. Girls, on the other hand, emphasize communication and conversation and perceive this as a way of connection and support (Block, 1983). These communication tendencies follow both boys and girls in their communication with their parents. In a study by Polce-Lynch, Myers, Kilmartin, Forssmann-Falck and Kliewer (1998), results showed that boys restrict emotional expression, while girls increase emotional expression during adolescence. According to the researchers, the level of emotional expression may be a function of culturally prescribed gender roles. This impacts on girls' tendency to share more information with their parents about social lives and dating habits than boys. Girls were found to be more willing to talk to their parents about their date's identity and how they showed affection than boys (Daddis, & Randolph, 2010)

Furthermore, this study even though found cohesion as a significant predictor of Total YSR emotional and behavioural problems, communication did not predict these problems, as were found by Grotevant and Cooper (1983). This could lead to a conclusion that there may be a problem in the translation of the items included in each of these (communication and cohesion) subscales or even the content of these items may not fit Cypriot culture. This link between our findings could lead to the conclusion that the fact that communication was found not to predict mental health problems might be due to the items included in the Family Communication scale. Further attention should be given to the adaptation of this scale to a Cypriot sample.

Although family functioning and family communication did not predict mental health problems, the present findings showed that significant gender differences occurred in parental attachment, family communication and family functioning. This finding supports previous studies which have highlighted the effects of gender and age on family factors such as attachment (Muris et al., 2003; Roelofs, et al., 2006), which is not surprising if Cypriot culture is considered. For example, Cypriot girls have closer relationships with their parents than Cypriot boys, while boys are more independent than girls in Cyprus. Additionally, at the age of 15 boys are allowed to go out alone and have a social life while girls have to stay at home until the age of 16-17. However, future studies need to examine the extent to which gender differences in independence have an effect.

Another surprising finding is that even though there are significant age differences regarding adolescent mental health problems, with older adolescents experiencing more mental health problems than their younger counterparts, no age differences were found regarding parental attachment and communication. This finding shows that possible underling mechanisms may be involved within the association of family factors (Attachment, Functioning and Communication) and adolescent mental health problems. As this study is not in a position to answer this question, further research on underling mechanisms involved in the relationship between the family and adolescent wellbeing should be conducted.

5.5.1. Limitations and Future Recommendations

These findings should be evaluated in the context of the study's limitations. As with any study, its findings may be measurement-specific and replication is needed.

Measurements included the use of self-reports from adolescents. Increasing the method variance by including parental reports and observational data might offer additional utility and give a more complete picture of the relationships among attachment, functioning, communication and psychopathological symptoms.

Finally, this study relied on a sample of adolescents from community settings and so it remains to be seen whether the current findings can be replicated in a sample of youth diagnosed with mental health problems. Investigating the family impact within a clinical sample and comparing such findings with the results from community settings would provide a more comprehensive picture of the impact of family on adolescent mental health problems.

5.6. Conclusion

In conclusion, the results of this chapter provide evidence on the existence of mental health problems during adolescence as a significant number of Cypriot adolescents experience some range of emotional and behavioural problems. In addition, while Internalizing problems were found to be associated with both gender and age, Externalizing problems were not associated with any of these two factors. Despite the indication of the existence of mental health problems in Cypriot adolescents, it can be speculated that some characteristics of Cypriot families may act as risk factors in adolescent mental health. This Chapter has illustrated that parental attachment is a significant predictor of emotional and behavioural problems in adolescents. However, both family functioning and family communication were found not to impact on adolescent mental health problems.

The value of this study lies in the fact that it is the first, to our knowledge, to focus on the prevalence rates of emotional and behavioural problems in Cypriot adolescents, information that it is necessary for preventing such problems. In addition, it is also the fact that it focuses on the complex relationships between behavioural and emotional problems on the one hand and perceived family impact on the other. The exploratory character makes replication necessary but if these results can be confirmed, for example by a different population – i.e. clinical adolescents –they carry important implications for the focus and content of interventions in adolescence.

CHAPTER 6: ADOLESCENT MENTAL HEALTH PROBLEMS AND THE FAMILY: A COMPARATIVE STUDY BETWEEN ADOLESCENTS FROM COMMUNITY AND CLINICAL SETTINGS (STUDY 2)

6.1. Overview

Despite the association observed in Chapter 5 between adolescent mental health problems and family attachment, the link between family and psychopathological symptoms in clinically referred adolescents, and whether or not clinical and non-clinical adolescents perceive family differently, remains unclear. This Chapter was therefore developed to make up for this limitation and to enhance our knowledge of the contribution of the family to the development of adolescents' psychopathological symptoms.

6.2. Introduction

While most of the research conducted in this field has been primarily based on non-clinical adolescents, another way of investigating the association between family and the mental health of adolescents is by examining the way the family impacts on clinically referred adolescents. Previous comparative studies, which reviewed family as risk factors for the development of mental health disorders, have mainly focused on parental attachment, family functioning and family communication as the main factors associated with adolescents' psychopathology (Allison, Stacey, Dadds, Roeger, Wood & Martin, 2003; Bogels & Benchman-Toussaint, 2006; Claveirole & Gaughan, 2011;

Friedmann, McDermut, Solomon, Ryan, Keitner & Miller, 1997). The main focus of this study is based on these three factors.

Firstly, empirical studies support a relationship between attachment and clinical status during adolescence. Specifically, adolescents with behavioural problems were found to be insecurely attached to their parents (Wallis & Steele, 2001; Bogels & Benchman-Toussaint, 2006; Claveirole & Gaughan, 2011). In a study by Wallis and Steele (2001), which assessed adolescents from psychiatric adolescent units in England, the findings illustrated that the number of adolescents presented as securely attached to their parents was low, whereas the incidence of insecure attachment in the sample was extremely high. However, as clinical samples of adolescents have come to be studied, recent studies have indicated that different types of mental health problems tend to be associated with different types of attachment insecurity (Claveirole & Gaughan, 2011). For example, ambivalent attachment was found to be related to children diagnosed with Externalizing problems such as aggression (Claveirole & Gaughan, 2011), while Internalizing problems such as anxiety were found to be associated with disorganized attachment (Bogels & Benchman-Toussaint, 2006).

Despite the existing literature assessing the impact of attachment on clinically referred adolescents, there are some studies which have examined the role of attachment in the development of mental health problems during adolescence by examining the differences between clinical and non-clinical groups. For example, Brown and Wright (2003) found significant differences between adolescents from clinical settings and non-clinical adolescents on attachment classification. Clinically referred adolescents with insecure attachment patterns reported significantly more psychopathological symptoms compared to non-clinical adolescents who reported secure attachment classification (Brown & Wright, 2003). In the same vein, the results of another study showed that

adolescents diagnosed with depressive disorders scored significantly lower on parental attachment than adolescents with no diagnostic problems (Essau, 2004).

A second line of research has examined the role of the dimension of family functioning in adolescent mental disorders. It can be argued from the previous literature that psychiatric disorders are often associated with family dysfunction (Friedmann, et al., 1997; Trangkasombat, 2006). There is some evidence that extremes in cohesion, either low or high, in combination with extremes in adaptability or rigidity and disengagement are associated with children with anxiety disorders, depression, aggression or affective disorders (Peleg-Popko & Dar, 2001; Katz & Low, 2004; Cuffe, McKeown, Addy & Garrison, 2005).

Friedmann, McDermut, Solomon, Ryan, Keitner and Miller (1997) examined several dimensions of family functioning by comparing families of adolescents with different psychiatric disorders, including schizophrenia, bipolar disorder, depression, anxiety, eating disorders, substance abuse and non-clinical families. Their results showed that, regardless of the specific diagnosis of the adolescents, there was a significant difference on family functioning between clinical and non-clinical families (Friedmann, et al., 1997). This was supported by a study by Ronan, Dreer and Gerhart (2008), who illustrated that family functioning predicted a symptomatology of mental disorders in adolescents when family functioning was compared between adolescent psychiatric patients and non-clinical adolescents. As argued by Friedmann et al. (1997), the association between impairment in family functioning and mental health problems in clinically referred adolescents could be explained by the fact that having a family member in the acute phase of a psychiatric disorder appears to be a risk factor for poor family functioning as it impacts problem solving, communication, affect expression and responsiveness and role allocation within the family environment.

To this end, a more recent study by Young, Galvan, Reidy, et al (2013) aimed to evaluate the facets of family functioning that are associated with adolescents diagnosed with Bipolar Disorder (BD) and Attention Deficit/Hyperactivity Disorder (ADHD). They compared BD and ADHD adolescents with typically developed adolescents, all aged between 7 and 17 years. With the use of self-report questionnaires, they found significant differences between mental disorders and family functioning by comparing clinical and typically developed adolescents. Specifically, both BD and ADHD participants had worse scores on family functioning and were more likely to score in the clinical range than non-clinical adolescents. They argued that these differences might have been due to numerous family-related deficits that occur when a family member with a mental health disorder produced stressors within the family system. For example, the worse family functioning found in BD participants compared with non-clinical adolescents could be explained firstly by the relationship between mood status and family interactions (Young, Galvan, Reidy, Pescosolido, Kim, Seymour & Dickstein, 2013) and secondly by their impaired problem solving skills which increased BD adolescents' ability to struggle identifying family conflicts/stressors and generate adaptive solutions (Fristad, Verducci, Walters, & Young, 2009).

The third key area that characterizes families attending child and adolescent mental health services is communication. Frequently, children and adolescents who attend mental health units present problems with family communication (Allison, et al., 2003). As seen in Chapter 3 (Section 3.4), the way family members communicate gives opportunities to both parents and their children to shape coping and positive health behaviour, to enable adolescents to express their concerns and feel valued, and this is conducive to adolescent mental health (Elgar, Craig, & Trites, 2013). In support, it has

been found that poor family communication and a lack of encouragement of autonomy were associated with children's anxiety disorder (Peleg-Popko, 2002). In addition to this, Schrodt, Ledbetter and Orht (2007) demonstrated that family conversations, conformity orientations, parental confirmation and affection were both positively and negatively associated with children's mental health. For example, on the one hand, when parents build a climate in which all family members are encouraged to participate in interactions about a variety of topics, children are more likely to develop greater self-esteem and to report less perceived stress and fewer mental health symptoms. On the other hand, when family communication stresses a homogeneity of attitudes, values, and beliefs, and produce interactions that focus on conflicts, children are less likely to develop self-esteem and more likely to report mental health problems (Schrodt, Ledbetter &Orht, 2007).

In addition, communication was found to be associated with family functioning. Grotevant and Cooper (1983) studied the role of family communication in the adolescent mental health. They noted the importance of communication to helping family members strike a balance between separateness from and connectedness to each other. Their work linked family communication and balancing cohesion from the FACES scale.

Gender and age were also found to predict mental health problems in clinically referred adolescents (McWey, Cui, & Pazdera, 2010). As seen in a study by Kjelsberh and Nygren (2004), institutionalized children (in psychiatric institutions), aged 6 to 18 years, were found to have significant gender differences, with girls scoring higher than boys on the Youth Self-Report scale, indicating that clinically referred girls experience more emotional and behavioural problems than clinically referred boys. Although there was also a significant gender difference between clinical and non-clinical children on

mental health problems, there was no significant difference between non-clinical boys and non-clinical girls (Kjelsberh & Nygren, 2004). Age was also found to predict mental health problems in both clinical and non-clinical children, with older adolescents scoring higher on YSR than the younger ones (Kjelsberh & Nygren, 2004).

A more recent study by McWey et al. (2010) replicated the findings of the association between gender, age and mental health problems. McWey et al. (2010) argued that both Internalizing and Externalizing problems in adolescents with mental health problems were affected by gender and age. Specifically, they found that both Internalizing and Externalizing problems decrease over time, a decrease that was more evident in boys than girls. This is because girls tend to exhibit internalizing behaviour when coping with interpersonal and family problems, whereas boys tend to externalize (Maschi, et al., 2008).

Furthermore, many studies of family structure and youth mental health focused on impact of single parenting and stepparent families on children and adolescents' psychopathology (Aseltine, 1996; Cherlin, 1999; Phythian, Keane & Kull, 2008; Levin & Currie, 2010). Zimmerman (2005) found that single parenting is a strong predictor for adolescents' mental health. As argued by previous research, families with only one parent are characterised by levels of negativity, low levels of support and parental involvement in their child life (McLanahan & Sandefur, 1994) and by financial distress as consequence of the changes in the family's economic circumstances (Amato & Keith, 1991). In support, these characteristics were found to be associated with mental health problems. For example, Roustis, Chaix and Chauvin (2007) illustrated that youth from single parent families were more than twice as likely as youth from two parent families to have internalising problems and were almost three times more likely to have externalising problems.

Based on previous research, and adding to the minimal research on comparative studies between clinical and non-clinical adolescents, this study is designed to examine differences between adolescents from both a clinical and community setting on the influence of family in adolescent mental health problems. Attachment, family functioning and family communication were considered along with gender and age implication. Specifically, this comparative study will examine:

- *The prevalence of emotional and behavioural problems among adolescents in a clinical setting*.
- *Differences on prevalence of emotional and behavioural problems between adolescents from community and clinical settings*.
- *Gender, age and parental marital status differences on adolescents' emotional and behavioural problems from both settings*.
- *Predictors of Internalizing and Externalizing syndromes in the two settings*.
- *Differences in Family factors (attachment, functioning and communication) between adolescents from clinical and community settings*.
- *The association between family attachment and adolescents' emotional and behavioural problems*.

The hypotheses examined in this study are as follow: 1) adolescents in the clinical settings will have significantly higher rates of emotional and behavioural problems compared to adolescents from community settings (on all YSR subscales); 2) both gender and age will predict emotional and behavioural problems. Based on the findings from Chapter 5, girls are expected to have significantly higher rates of mental

health problems than boys and older adolescents will have significantly higher rates of mental health problems than the younger ones. Additionally, adolescents from clinical sample are also expected to have a significant different in parental marital status than adolescents from community setting, living with single parent; 3) Parental attachment, family communication and family functioning will predict adolescents' psychopathology by indicating whether or not an individual fits into a category (clinical or non-clinical); 4) There will be a significant group differences on attachment, family functioning and family communication, with adolescents from a clinical setting experiencing less attachment, poorer functioning and poorer communication than adolescents from a community setting; 5) Insecurely attached adolescents will have higher scores on emotional and behavioural problems than securely attached adolescents.

6.3. Methods

6.3.1. Design

This is a *cross-sectional research design* using a survey method that aims to compare emotional and behavioural problems among adolescents in clinical and community settings, and to examine if socio-demographic information (gender and age) and family factors (attachment, functioning and communication) differ in these two groups.

6.3.2. Participants

The *clinical group* consisted of a total of *92 outpatient adolescents* who had been referred to the Child and Adolescent Mental Health Units in different towns of Cyprus. All these adolescents were referred for the treatment for specific mental disorders. However, in compliance with ethical requirements, the diagnosis of each participant was not requested. Twelve clinical participants were excluded from the analyses due to numerous missing responses to the items on each scale and, secondly, because they had circled the same response throughout the questionnaire. Therefore the total sample for the analysis for the clinical sample is based on 80 adolescents (n=80).

A *sub-sample of 132 adolescents* (n=132) from the first study was randomly selected as a comparison group (i.e. adolescents from community setting). A random sample of cases in SPSS was conducted in order to get this group. As a result, 212 adolescents (N=212), from both clinical and community settings, aged 12 to 17 years old (M=14.48, SD=1.50) were used for the analysis of this Chapter.

Table 6.1: Demographics of adolescents in Study 2 (N=212)

	Community	**Clinical**
	n (%)	n (%)
	(n=132)	(n=80)
Gender		
Boy	67 (50.8%)	47 (58.8%)
Girl	65 (49.2%)	33 (41.2%)
Age		
12-14 years old	36 (27.3%)	48 (60%)
15-17 years old	96 (72.7%)	32 (40%)
Parental Marital Status / Live with		
Biological mother and biological father	118 (89.4%)	46 (57.5%)
Only mother	9 (6.8%)	20 (25%)
Only father	0 (0%)	4 (5%)
Biological mother and guardian	4 (3%)	8 (10%)
Biological father and guardian	0 (0%)	0 (0%)
Other	1 (0.8%)	2 (2.5%)
District		
Nicosia	29 (22%)	43 (53.8%)
Limassol	43 (32.6%)	21 (26.3%)
Larnaca	28 (21.2%)	8 (10%)
Paphos	14 (10.6%)	6 (7.5%)
Famagusta	18 (13.6%)	2 (2.5%)

6.3.3. Procedure

Prior to data collection, the necessary permissions from the University of Roehampton Ethics Board (Appendix II), the Cyprus National Bioethics Committee (Appendix III) and the Ministry of Health/Mental Health Services (Appendix IV) were obtained. Psychologists in the mental health units informed first the adolescents about the purposes of this study and asked if they were interested in taking part in the study. Then, if they agreed to participate, consent forms for them (Appendix XI) and their parents (Appendix XII) were provided. Only adolescents who returned a signed brought back a consent form by themselves and their parents were allowed to participate.

The questionnaires were administered to the adolescents in the clinical setting during daytime, in a quiet room in the Child and Adolescent Mental Health Unit and in the presence of a staff member, as agreed with the Director of the Unit. Only the researcher (CD), who has been Criminal Records Bureau (CRB)-checked, administered the set of the questionnaires to the adolescents. The researcher was present throughout the questionnaire completion to provide assistance if needed and to ensure confidential responses. The questionnaires took approximately 45 minutes to complete. Upon completion of the questionnaires, the adolescents were given a debriefing sheet (Appendix X) with information about the study and the contact details of the researcher and her Director of Studies, as well as a counselling helpline number and contact. With regard to the recruitment procedure of the non-clinical group, please refer to Chapter 5, Section 5.3.3.

6.3.4. Instruments

A demographic information form (Appendix XIII.2), the same one used in Chapter 5 (Section 5.3.4. Instruments), was also used for the adolescents from the clinical setting, with the only difference that, in this study, the adolescents from the clinical setting also provided information about the socio-economic status of their parents. This was requested by the Cyprus National Bioethics Committee.

Emotional and behavioural problems were assessed by using Youth Self-Report (YSR; Appendix XIII.3), while family factors (attachment, family functioning, family communication and family satisfaction) were assessed by using Family Adaptability and Cohesion Evaluation Scale (FACES; Appendix XIII.6) and Inventory of Parent and Peer Attachment (IPPA; Appendix XIII.7) (measures described in detail in Chapter 4, Section 4.5.1).

Table 6.2: Measures used in this Chapter/Study2

Instrument	What measures	Number of items	Reference
Demographic Information	Socio-demographic Information	15	New
YSR	Withdrawn, Anxiety/Depression, Somatic Complaints, Social, Thought and Attention problems, Delinquent and Aggressive Behaviour	113	Achenbach (1991b)
IPPA – parents' scale	Attachment (Trust, Communication, Alienation)	26	Armsden & Greenberg (1987)
FACES	Family Functioning (Cohesion, Flexibility, Disengagement, Enmeshed, Chaotic and Rigid environment) and Family Communication	62	Olson (2011)

Table 6.3: Reliability of the measures for both clinical and non-clinical adolescents

Measurement	Cronbach's α		
	Clinical	Community	Total
YSR	0.96	0.94	0.97
IPPA – Parents' scale	0.78	0.67	0.75
FACES	0.90	0.85	0.88

6.3.5. Statistical Analysis

Data were transferred to SPSS for analyses. As the sample is not large enough to explore differences between all the syndromes of Youth Self-Report, this Chapter mainly focuses on Internalizing and Externalizing problems.

Data was screened for outliers (univariate and multivariate), missing values and for assumption of normality of distribution. Twelve questionnaires from the clinical sample were found to have more than 5% missing data (Tabachnik and Fidell, 2007), so they were excluded. Hence the data from 80 clinical participants was left for analysis. No missing data was found in questionnaires from non-clinical adolescents. Due to the fact that the sample was not big enough to remove outliers, transforming the data was used as a method to deal with outliers. As Field (2009) argued, by transforming the data, skew can be reduced. However, because transformation of the data did not resolve the skewness, a decision was made to include the outliers in the data analysis. A *Kolmogorov Smirnov (KS) test* was implemented for checking the normality of data distribution. Kolmogorov-Smirnov tests showed significant results, indicating that the data was not normally distributed, (Field, 2009). Therefore, non-parametric tests were used.

In order to establish the prevalence rates of emotional and behavioural problems, the same cut-off scores used in Chapter 5 were used. In addition, in order to examine significant clinical differences, *Mann-Whitney tests* were used to compare the YSR scores between the two sample groups and to compare different gender and age groups in terms of YSR Internalizing, Externalizing and Total problems. *Logistic regression* was used with the clinical and community settings as the binary outcomes to explore family predictors of mental health problems. The FACES and IPPA subscales were included in the logistic regression model as predictors. Mann-Whitney tests were also

used to compare FACES and IPPA scores of participants in the different settings. Chi-squared tests were used to compare attachment classifications in the clinical and non-clinical groups.

6.3.5.1. Checking for Assumptions of the Tests Used in this Chapter / Study 2

Assumptions of Mann-Whitney tests: Data was not normally distributed, thus a Mann-Whitney test needed to be used. Levene's test was calculated in order to assess homogeneity of variance. The results from Levene's test illustrated that some variables were significantly different and for most of the variables the assumption of homogeneity of variance had been violated.

Assumptions of Chi-square test: Seeing the assumption of independence of data, each person contributed to only one cell of the data. Therefore, this assumption is not violated. Stating that the expected frequencies should be greater than 5%, exploratory analysis of chi-square indicated that 0 cells had an expected count of less than 5 and the minimum expected count was 33.35. Thus, this assumption is met.

Assumptions of Logistic Regression: Logistic regression can handle different kind of relationships so no assumption of linearity is necessary. The outcome variable is binary. The sample, on whether participants were diagnosed with any mental health problems or not, was used as an outcome variable, while family factors were used as predictors. The entry method was used for predictors. It is important in logistic regression to collect enough data to obtain a reliable regression model. In this respect, sample size calculation was used based on Miles and Shevlin's (2001) estimations where, in order to detect a large effect, a sample size of 80 is sufficient and for a medium effect, the sample size has to be 200. The sample size of this logistic regression

was 212 participants, and was thus adequate to expect a large or medium effect. Finally the most important assumption of Logistic Regression is the lack of multicollinearity. In order to assess multicollinearity, Spearman's Correlation coefficients were checked between the predictor variables in the model. As can be seen in the table below, there are variables that have a correlation higher than .80. Following the rule of scan, stating that intercorrelation among predictors above .80 signals a problem (Jacop, 1969), a decision was taken to remove some variables which cause multicollinearity. In this respect, balanced flexibility, the cohesion score, parental trust and parental communication were removed (Table 6.4).

Table 6.4: Spearman's correlation coefficients between predictors (N=212)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Balanced Cohesion	-														
2. Balanced Flexibility	**.80****	-													
3. Disengaged	-.48**	-.41**	-												
4. Enmeshed	.19**	.20**	.18**	-											
5. Rigid	.42**	.53**	.02	.47**	-										
6. Chaotic	-.40**	-.38**	.64**	.27**	.00	-									
7. Commun-ication	.76**	.72**	-.53**	.07	.32**	-.41**	-								
8. Satisfaction	.63**	.58**	-.52**	.07	.19**	-.40**	.72**	-							
9. Cohesion Score	**.94****	.78**	-.64**	.34**	.43**	-.44**	.76**	.66**	-						
10. Flexibility Score	.54**	.76**	-.14**	.17*	.14	.16*	.49**	.38**	.49**	-					
11. Parental Attachment	.56**	.56**	-.27*	.27**	.38**	-.15*	.55**	.53**	.57**	.42**	-				
12. Trust	.61**	.61**	-.46**	.11	.26**	-.33**	.66**	.68**	.64**	.42**	**.81****	-			
13. Communi-cation	.61**	.56**	-.43**	.16*	.29**	-.27**	.66**	.66**	.64**	.41**	**.85****	**.82****	-		
14. Parental Alienation	-.38**	-.34**	.51**	.17*	.04	.40**	-.48**	-.54**	-.41**	-.20**	-.10	-.59**	-.50**	-	
15.Attachment Classification	-.42**	-.41**	.39**	.03	-.16*	.25**	-.52**	-.53**	-.44**	-.28**	-.49**	-.73**	-.69**	-.78**	-

$^{*}p < .05$, $^{**}p < .001$

The next thing that needed to be done before carrying out the main analysis of Logistic Regression was to check residuals. 191 participants were included in the analysis because 21 participants had missing values. The predicted probabilities and residuals of the two models were used to examine the good fitness of the model. Standardized residuals were used to check that no more than 5% of cases had an absolute value above 2, no more than 1% had an absolute value above 2.5 and no case was above 3 (outlier). Based on this, no further cases were excluded. Cook's distance values above 1 were checked and no cases needed to be excluded. The calculation of the average leverage of the model was made using the equation $\frac{predictors+1}{N} = \frac{11+1}{191}$ =.06 in order to look for leverage values greater than three times this average value (.18). There were no cases of leverage values above .18, thus no cases needed to be removed. Finally, DFBeta values greater than 1 were checked and no value was found. After checking residuals, none of the participants were excluded from further analysis and the number of participants remained as before at 191.

6.4. Results

6.4.1. Prevalence of Emotional and Behavioural Problems Among Adolescents from a Clinical Setting

Among the adolescents in the clinical sample, 26.6% scored in the clinical range on the YSR Total Problems scale, while 22.5% scored in the clinical range on both the Externalizing and Internalizing Problems scales. Of all the YSR subscales, Social Problems was the most common (18.8%), and the least common was Thought Problems (9.2%) (Table 6.5).

The prevalence of emotional and behavioural problems in adolescents from clinical setting was found to be higher compared to those in the community setting (prevalence rates of emotional and behavrioual problems in adolescents from community settings were takes from Chapter 5, see Section 5.4.1), With regard to the YSR subscales, adolescents from a clinical setting had a higher prevalence in all YSR syndromes, compared with adolescents from a community setting (Table 6.5).

Table 6.5: Prevalence rates of Cypriot adolescent mental health problems

Clinical n (%)	**YSR Syndromes**	**Community** n (%)
18 (22.5%)	**Internalizing Problems**	69 (11.4%)
9 (11.3%)	Withdrawn	34 (5.6%)
9 (11.7%)	Somatic Complaints	27 (4.5 %)
11 (13.8%)	Anxious / Depressed	32 (5.3%)
18 (22.5%)	**Externalizing Problems**	67 (11.1%)
12 (15%)	Delinquent Behaviour	30 (5%)
11 (13.9%)	Aggressive Behaviour	22 (3.6%)
15 (18.8%)	Social Problems	28 (4.6%)
7 (9.2%)	Thought Problems	32 (5.3%)
9 (11.4%)	Attention Problems	24 (4%)
21 (26.6%)	**Total Problems**	69 (11.4%)

6.4.2. Symptomatology of Adolescents in Clinical and Community Settings

The next step of the analysis was to compare the mean scores on the YSR subscales among adolescents in clinical and community settings, by using Mann-Whitney tests (Table 6.6). Results showed that adolescents from clinical setting experience more emotional and behavioural problems than adolescents from the community setting.

Table 6.6: Mann-Whitney tests for differences between sample groups and YSR syndromes (N=212)

	Clinical Median	**Community** Median	U	z	r
Internalizing Problems	21.00	11.00	3129**	-4.97	-.34
Withdrawn	6.00	3.00	2865.5**	-5.61	-.39
Somatic Complaints	3.00	2.00	4170*	-2.59	-.18
Anxious / Depressed	11.50	6.50	3240.5**	-4.72	-.32
Externalizing Problems	19.00	11.00	2753**	-5.84	-.40
Delinquent Behaviour	5.00	2.00	3134**	-4.99	-.34
Aggressive Behaviour	14.00	8.00	2817**	-5.70	-.39
Social Problems	4.50	2.00	2653.5**	-6.12	-.42
Thought Problems	4.00	2.00	3434.5**	-4.31	-.30
Attention Problems	8.00	4.00	2468.5**	-6.52	-.45
Total Problems	70.00	37.00	2422.5**	-6.60	-.45

* $p < .01$, ** $p < .001$

6.4.3. Gender and Age Differences on Internalizing, Externalizing and Total YSR Scores Between Adolescents in Clinical and Community Settings

Mann-Whitney tests were used to explore the degree to which behavioural and emotional problems were related to the gender and the age of the participants. Separate tests for gender and age were conducted. The results revealed no significant gender difference adolescents' Externalizing, $U = 5278.5$, $z = -.67$, *ns*, $r = -.17$, and Total emotional and behavioural problems, $U = 5290$, $z = -.69$, *ns*, $r = -.05$. The only significant difference found was between boys and girls on Internalizing problems, $U = 4513.5$, $z = -2.41$, $p < .05$, $r = -.17$. Girls had an average rank of 117.44, while boys

97.09. No significant age differences were found in any of the YSR Syndromes (Internalizing problems: *U = 5234.5, z = -.32, ns, r = -.02*; Externalizing problems: *U = 4965, z = -.94, ns, r = -.06*; Total YSR scores: *U = 5102.5, z = -.63, ns, r = -.04*)

Even though insignificant age and gender differences on YSR scores, the average rank was higher in girls YSR Total problems (109.52) than in boys (103.36), while boys from both settings had an average higher score (109.20) on YSR Externalizing problems than girls (103.36). With regard to age, in both the community and clinical settings, younger adolescents (YSR Total Problems = 109.76; YSR Externalizing Problems = 111.39) had a higher average rank than older ones (YSR Total Problems = 104.36; YSR Externalizing Problems = 113.29) in YSR Total problems and Externalizing problems, whereas older adolescents (107.61) had higher average score than the older ones (104.82) on Externalizing problems.

Exploring these findings further, separate Chi-square tests were used between the sample groups and both gender and age. On gender, the results revealed no significant gender difference between adolescents from the community and clinical settings (x^2 *(1) = 1.28, ns)*. With regard to age, the results showed a significant age difference between adolescents from the clinical and community settings (x^2 *(1) = 22.30, p < .001)*.

6.4.4. Parental Marital Status Difference between Adolescents from Community and Clinical Settings

An analysis on the difference of parental marital status between community and clinical samples was carried out by using Chi-square tests. With regards to the

variable "living with both biological mother and father", results showed a significant parental marital status difference between adolescents from clinical and community settings, $x^2\ (1) = 12.75, p < .001$.This suggests that adolescents were 6.24 times more likely to live with both biological mothers and fathers if they were part of the community sample rather than the clinical sample.

There was a significant association between sample groups and whether or not adolescents live with a single parent (i.e. mother), $x^2\ (1) = 12.75, p < .001$. This suggests that adolescents from the clinical sample were 4.91 times more likely to live only with their mothers compared to adolescents from the community sample. This analysis was based on adolescents living only with mother due to small sample size adolescents living with their father only.

6.4.5. Predictors of Emotional and Behavioural Problems

Logistic regression analysis was performed to investigate to what extent family functioning, family communication and attachment were able to discriminate between adolescents from community and clinical settings. Due to the fact that prior results indicated significant differences between the sample and adolescents' psychopathology, this analysis also examined which family factors predicted mental health problems among adolescents from both community and clinical settings. For this purpose, a logistic regression model was used, using 11 predictors (Table 6.8).

Table 6.7: Logistic regression overall model evaluation

Tests	χ^2	df	p
Likehood Ratio Test	63.15	11	.00
Hosmer-Lemeshow Test Goodness-of-fit	3.80	8	.87
R^2-type indices			
Cox and Snell R squared = .28			
Nagelkerke R squared = .36			

Table 6.8: Logistic regression for predicting the group (adolescents from clinical and community settings) of the participants

			95% CI for exp b **(e^{β})**		
	β (SE)	**Wald's χ^2** (df=1)	Lower	e^{β}	Upper
Constant	1.93 (2.01)	.85			
FACES					
Balanced Cohesion	.00 (.07)	.00	.88	1.00	1.14
Disengaged	-.08 (.06)	1.86	.83	.93	1.03
Enmeshed	-.00 (.06)	.01	.89	1.00	1.11
Rigid	.07 (.06)	1.67	.96	1.08	1.20
Chaotic	-.04 (.06)	.34	.86	.97	1.09
Flexibility Score	-.04 (.07)	.46	.83	.95	1.09
Family Satisfaction	$-.11^{**}$ (.04)	7.26	.84	.90	.97
Family Communication	.03 (.04)	.59	.96	1.03	1.11
IPPA					
Parental Attachment	$-.05^{*}$ (0.2)	4.95	.91	.95	.99
Parental Alienation	$.22^{***}$ (.05)	16.64	1.12	1.24	1.38
Attachment Classification	3.41^{***} (.77)	19.69	6.71	30.23	136.26

$^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$

The addition of family functioning variables, family communication, family satisfaction and attachment variables was significant in the overall model, $\chi^2\ (11) = 63.15$, $p < .05$ (Table 6.7). The estimates for the coefficients of predictors included in the model showed that the coefficients for family satisfaction, total parental attachment score, parental alienation and attachment classification were significant with Confidence Intervals (CI) for exp (B) for family satisfaction 0.84 to 0.97, for total parental attachment 0.91 to 0.99, for parental alienation 1.12 to 1.38 and for attachment classification 6.71 to 136.26. This indicated that adolescents from clinical setting reported being less satisfied with their families, being less securely attached to their

parents and expressing greater dislike or rejection from their parents than adolescents from the community setting.

The Hosmer and Lemeshow test of goodness-fit of the model, χ^2 *(8) = 3.80, p > .05*, showed that the model predicts values which are not significantly different from those observed and thus indicating a good-fit of the model. In addition, the model is 78.5% accurate compared to 63.4% of the null model, indicating that the predictors explained better the possibility of someone fitting a clinical sample compared to the model without any variables. Finally, five cases in the model were incorrectly classified by the analysis. As a conclusion of this logistic analysis, low security between adolescent and parents and negative perceptions of family satisfaction appeared to be strongly related to the risk of experiencing mental health problems in adolescents.

As logistic regression partly supported the hypothesis that all three family factors (attachment, family functioning and family communication) would predict adolescent mental health problems, further analyses (section 6.4.4 and section 6.4.5) were conducted, investigating sample differences in these family factors.

6.4.6. Attachment, Mental Health Problems and Differences between Adolescents from Clinical and Community Settings

In order to investigate the association of attachment across settings, attachment variables were computed into a new variable, which contained two groups: high security and low security. The computation of the new variables was based on the original paper on the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987). As argued by Armsden and Greenberg (1987), a good way to investigate individual

differences in attachment across other measures is to create an exploratory categorization of the IPPA attachment scale. The score distribution of each IPPA subscale (Trust, Communication and Alienation) was divided into lowest, middle and highest third and attachment groups and assigned as followed: individuals who had a middle or low Alienation score and at least a middle Trust or Communication score were assigned to the High Security group (HS), while individuals were assigned to Low Security (LS) group if their Alienation scores were middle or high and their Trust and Communication scores were both low.

Based on this categorization, 191 (90.1%) of the 212 participants were convertible to attachment classification groups (52.4% was HS and 47.6% was LS). Specifically, from the community sample, 66 participants (54.5%) were designated as HS and 55 (41.7%) participants as LS (with 11 of them not assigned to either group), while from the clinical setting, 34 (42.5%) adolescents were assigned to the HS group, 36 (45%) to the LS group and 10 did not fit in any of the groups (Table 6.9). This finding indicated that most of clinically referred adolescents scored themselves low regarding being attached to their parents, while in contrast, most of the non-clinical adolescents scored themselves as being securely attached to their parents. However, when the attachment classification group was compared by settings, the result indicated that there was no significant difference between Low and High Security among adolescents from both settings, x^2 (1) = .63, *p=.43*.

Table 6.9: Contingency table. Attachment classification by sample groups

		Adolescent's group		
		Clinical	**Community**	**Total**
Parental Attachment	**Low Security**	36	55	91
	High Security	34	66	100
	Total	70	121	191
Chi square *p=.43*	.63			

Each of these differences was investigated further, using Mann-Whitney tests (Table 6.10). Significant differences between high and low security were found in YSR Internalizing, Externalizing and Total problems. Adolescents with low security had significantly higher sores on each of these scales than those classified as high security.

Table 6.10: Mann-Whitney tests for differences between sample groups and YSR (N=212)

	High Security Median	**Low Security** Median	U	z	r
Total Emotional and Behavioural Problems	30.00	61.00	1628*	-7.66	-.55
Internalizing Problems	9.00	20.00	1685*	-7.51	-.54
Externalizing Problems	10.00	17.00	2284.5*	-5.94	-.43

* $p < .001$

As no significant differences were found between the attachment classification and sample groups, further analysis was conducted between the sample groups and the IPPA subscales (Trust, Communication and Alienation) (Table 6.11). Mann-Whitney comparison tests ($p < .05$) indicated that the difference between attachment and sample groups was due to adolescents from the community setting reporting significantly higher average ranks on the IPPA Trust (120.56) and Communication (116.38) subscales than adolescents from the clinical setting (Trust = 83.29; Communication =

90.20). In contrast, adolescents from the clinical setting reported significantly higher average ranks on the IPPA Alienation subscale (125.38) than adolescents from the community setting (95.06) (Table 6.12), showing that adolescents from the community setting were more attached to their parents than those from the clinical setting while clinical adolescents felt more alienated.

Table 6.11: Mann-Whitney tests for differences between sample groups and IPPA

	Clinical Median	**Community** Median	U	z	r
Total Parental Attachment	79.50	86.00	4195.5*	-2.51	-.17
Trust	30.00	36.00	3423.5**	-4.29	-.29
Communication	28.00	32.00	3976*	-3.01	-.21
Alienation	21.00	16.00	3769.5**	-3.49	-.24

*p < .01, **p < .001

6.4.7. Differences in Family Functioning between Adolescents from Clinical and Community Settings

Mann-Whitney tests were conducted to explore group differences on the FACES subscales, these being the dependent variables and the sample (clinical vs. non-clinical adolescents) being the independent variable (Table 6.12).

Table 6.12: Mann-Whitney tests for differences between sample groups and FACES

	Clinical Median	**Community** Median	U	z	r
Balanced Cohesion	21.50	24.00	3853***	-3.30	-.23
Balanced Flexibility	20.50	23.00	4015**	-2.93	-.20
Disengaged	19.00	18.00	4526.5*	-1.74	-.12
Enmeshed	17.50	18.00	5026	-.59	-.04
Rigid	19.50	19.00	5184.5	-.22	-.02
Chaotic	18.00	18.00	4772.5	-1.18	-.08
Cohesion Score	21.00	24.25	3936.5**	-3.11	-.21
Flexibility Score	21.00	22.25	3984.5**	-3.00	-.30
Family Satisfaction	28.50	38.00	2876***	-5.56	-.38
Family Communication	31.50	36.00	3807***	-3.41	-.23

*p < .05, **p < .01, ***p < .001

The results revealed that adolescents in the clinical setting had significantly lower scores on the Balanced Cohesion, Balanced Flexibility, Cohesion Score, Flexibility Score and Family Satisfaction subscales than adolescents in the community setting. In contrast, adolescents from the community setting reported significantly lower scores on the Disengaged scale compared to adolescents from the clinical setting.

6.4.8. Differences in Family Communication between Adolescents from Clinical and Community Settings

There were significant differences between adolescents from clinical and community settings on family communication. The average rank was higher in adolescents from the community setting (117.66) than from the clinical setting (88.09), indicating that adolescents from the clinical setting have poorer communication that those from the community setting (Table 6.12).

6.5. Discussion

The main purpose of this Chapter was to explore the differences between adolescents in a clinical and adolescents in a community setting with regard to both their symptomatology and their family environment. In addition, this Chapter also aimed to investigate gender and age effect on adolescents' mental health problems and to explore the impact of family factors (i.e. attachment, functioning and communication) on adolescents' overall emotional and behavioural problems.

The main findings of this study may be summarized as follows. Firstly, as expected, the results showed significant differences on Internalizing and Externalizing problems between adolescents from clinical and community settings. Adolescents from the clinical setting reported significantly higher levels of Internalizing and Externalizing problems compared to adolescents from the community setting. This finding is similar with previous research from several countries, such as in the UK (Brown & Wright, 2003) and Norway (Kjelsberg & Nygren, 2004) which revealed that a clinical group of adolescents scored significantly higher on Externalizing, Internalizing and Total emotional and behavioural problems comparing with non-clinical adolescents. As argued by Kjelsberg and Nygren (2004) functional impairment and stressful diagnostic conditions could explain these differences. For example, characteristics such as experiences of distress in terms of worry, as well as dysfunction in the social and occupational spheres of life are related to mental health disorders (Ustun & Kennedy, 2009).

In addition, as the adolescents from the clinical setting were already diagnosed with mental health problems, they were more likely to have difficulties in dealing with their emotions (Kjelsberg & Nygren, 2004), and thus experienced significantly more emotional and behavioural problems compared to adolescents from the community setting. Considering previous research, many of the hormonal, neural and cognitive systems thought to underlie the regulation of emotions appear to mature throughout the period of adolescence (Spear, 2000). Consequently, emotional regulation may be implicated in diverse forms of Internalizing and Externalizing problems, as these problems may negatively impact or ameliorate negative affect, such as problem solving or cognitive restructuring (Dodge & Garber, 1991). However, as this study did not assess emotional regulation, this conclusion needs further investigation.

Secondly, in contrast to the hypothesis, gender and age did not predict overall emotional and behavioural problems in both settings. This comes in contrast with previous findings, which showed that there is an association between gender, age and emotional and behavioural problems (Kenny, Dooley, & Fitzgerald, 2013). While most studies showed that girls tend to internalize their problems and boys tend to externalize them (McWey, et al., 2010), and that mental health problems increase over time for both sexes (Rescorla, et al., 2007) this is not the case in the present study. One explanation of this may be the fact that as the participants were aged from 12 to 17 years, there is an age range where differences occurred in the impact of gender on adolescent mental health. Thus, it may be possible that gender differences in mental health problems may occur in older adolescents, but not in younger ones. As argued by Nolen-Hoeksema and Girgus (1994), there are no gender differences in depression in early adolescence but after the age of 15, girls are more likely to experience mental health problems than boys. In addition, while gender denotes biologically-determined characteristics, gender also indicates culturally- and socially-shaped variations between boys and girls (Afifi, 2007). Given this finding and its dissimilarity with previous research, it is important for further research to investigate any mechanisms, including cultural factors and age, that may impact the association between gender and mental health problems.

Although there was no gender difference in overall mental health problems and Externalizing problems, there was a significant gender difference on Internalizing problems, with girls having higher scores than boys. This association is in line with the literature on gender and Internalizing problems in adolescents. As found by Kapi et al. (2007) Greek and Finnish girls scored significantly higher than boys on Internalizing problems. As reported by the WHO (2002) the lower self-esteem of adolescent girls

compared to boys in the same age group, and their anxiety over their body-image, could result in a higher prevalence of Internalizing problems, such as depression in adolescent girls when compared to adolescent boys.

The findings of this study showed that age did not significantly affect adolescent mental health problems. This finding is dissimilar to previous research documenting significant age differences in adolescent mental health problems (Rescorla, et al., 2007). However, the number of adolescents from community setting in the older group is significantly higher than the number of those in the younger group. This unbalanced variation may impact the outcome of the age differences in adolescent mental health problems and thus should be considered. Consequently, a better distribution of age is needed in order to explore more accurate results with regard to the effect of age on adolescent mental health problems.

Adolescents from the clinical sample were significantly more likely to live in a single-parent family (mother) compared to adolescents from the community sample who were significantly more likely to live with both biological parents. This finding supports previous research, which showed that adolescents living in a single-family household and in stepfamilies were more likely to experience behavioural and emotional problems compared to adolescents living in two parent families (McLanahan & Sandefur, 1994). The differences between the two groups were because of the lower socioeconomic status of the single-parent families and the lower parental ability to provide informal care, control monitoring, supervision and support to children in single-parent households (Van Voorhis, Francis, Richard, & Connie, 1988). Therefore, it can be argued that growing up in single parent family or a stepfamily is associated with a lower level of children and adolescents' well-being and poorer life outcomes than living

in a family with two biological parents, consequences that might predict mental health problems in this population.

Thirdly, when all family factors (i.e. attachment, family communication and family functioning) were inserted in a logistic model, the results partly supported the hypothesis that parental attachment, family functioning and communication will predict emotional and behavioural problems in both community and clinical samples. The family factors which predicted adolescent mental health problems were attachment and family satisfaction. Adolescents with low security attachment and feelings of rejection were found to be at greater risk of developing psychopathological problems. This finding confirms the global argument that psychopathology is associated with profound insecurities regarding attachment experiences (Wallis & Steele, 2001; Fanti, Henrich, Brookmeyer, & Kuperminc, 2008). In addition, the fact that functioning and communication were found to be unimportant predictors of psychopathological symptoms in Cypriot adolescents contrasts with the accumulated evidence from a number of sources which suggest that both disordered family functioning and communication predict a wide range of psychiatric problems in children (Schrodt, Ledbetter & Orht, 2007; Ronan, Dreer & Gerhart, 2008).

In terms of attachment, the finding supports the hypothesis that adolescents with high security attachment would report lower levels of symptomatology than adolescents with low security attachment. Adolescents with low security reported higher values of Internalizing, Externalizing as well as total emotional and behavioural problems than adolescents with high security. Additionally, clinically referred adolescents had a significantly lower perceived attachment to their parents compared to adolescents without psychiatric disorders. Similar findings have been reported by Brown and

Wright (2003) in that low attachment to parents was associated with more symptoms than adolescents classified as having high security to their parents. Also, these findings substantiate the link between the quality of attachment and clinical status during adolescence, which has been identified theoretically and supported in previous research (Rosenstein & Hoeowitz, 1996). Thus, the experience of insecure attachment seems to be highly related to the risk of suffering from emotional and behavioural problems.

One explanation of these findings is derived from the literature in Attachment, which indicates that insecurely attached children develop perceptions of the environment as uncontrollable, based on frightening parental behaviour (Barlow 2002). Another explanation is that a sense of autonomy in adolescents may be impeded by the experience of insecurity and this leads to the development of emotional and behavioural problems (Crowell & Feldman, 1991).

However, as this research was unable to examine the direction of the relationship between attachment and adolescent mental health problems, it could also be argued that not only does attachment impact emotional and behavioural problems during adolescence, but also that both Internalizing and Externalizing problems could influence perceptions of adolescent quality of attachment to their parents. For example, as found by Buist, et al. (2004), anxious and depressed adolescents have a negative view of their relationship with their parents due to their interpersonal problems, something that, in turn, cause difficulties, for their parents in relating to their adolescent child. In support, having a delinquent adolescent may be so demanding for families, that the relationship between adolescent and parent was described by the parents as dysfunctional (Barnes & Farrell, 1992).

An interesting finding is that no difference is observed between attachment classification and sample groups. When the Inventory of Parent and Peer Attachment scale was recalculated and used as form of high and low security, no difference was found between adolescents from the clinical and community settings. This finding comes in contrast to previous research, which found significant difference between attachments and clinical vs. nonclinical adolescents (secure attachment classification in adolescents from community setting, and insecure attachment classification in clinically referred adolescents; Brown & Wright, 2003). In addition, this finding comes also in contrast to the fact that adolescents from community setting significantly differed in all IPPA subscales compared to adolescents from clinical setting. The comparison between these two findings could lead to the conclusion that classifying the IPPA scale may not be an effective approach, compared to the use of its subscales. Thus, it can be concluded that it is better to use the original form of the scale, including the Trust, Communication and Alienation subscales rather than attachment classification (high and low security).

In terms of family functioning, it did not predict adolescent mental health problems. This comes in contrast with previous research that showed poor functioning within families of adolescents with psychiatric disorders compared with families with non-clinical adolescents (Trangkasombat, 2006). To explore this finding, additional analysis was conducted to determine whether family functioning was different according to the sample groups. Adolescents with psychiatric problems reported significantly poorer family functioning than those in the community sample. The dysfunctions were in the dimensions of cohesion, flexibility, disengaged and satisfaction. Specifically, adolescents from the community setting tended to report their families as being more flexible and cohesive compared to adolescents from clinical setting, while adolescents from the clinical setting tended to report their families as

being more disorganized than those of the community setting. Clinically referred adolescents also reported dissatisfaction with the way their family system works and supports them. These findings are in keeping with previous studies which indicated that the family functioning of psychiatric patients was less healthy than that of non-clinical respondents (Gehring & Marti, 1993; Trangkasombat, 2006). In addition, this result supports the findings of other studies, which assessed different cultures. For example, Trangkasombat (2006) examined children and adolescents from Thailand and found that the scores of young people with psychiatric problems were significantly lower than the control group on family functioning, reflecting poor family functioning. In support, the same pattern was found in an American study conducted by Friedmann and colleagues (1997), where the results illustrated that, regardless of the specific diagnosis, having a child at an acute phase of a psychiatric illness was a risk factor for poor family functioning compared to the functioning of control families. Therefore, it can be argued that family functioning was not a predictor of mental health problems *per se* unless accompanied by the sample group. Consequently, dysfunction and dissatisfaction is a fairly good factor for distinguishing between adolescents with emotional and behavioural problems and non-clinical adolescents, even though logistic analysis revealed that family functioning did not predict adolescent mental health problems.

In relation to family communication, although communication was found not to predict mental health problems, further analysis of family communication supported the hypothesis that adolescents from clinical settings will report significantly lower scores in family communication than adolescents from community settings. Adolescents from community settings were found to have positive communication skills utilised in the family system whereas adolescents from clinical settings were found to have problems in communication. This finding supported evidence from previous research which

demonstrated that families attending child and adolescent mental health units lacked communication (Allison, et al., 2003) and that poor family communication was related to emotional and behavioural problems in adolescents such as anxiety (Peleg-Popko, 2002). Thus, this finding gives additional evidence that family communication is a correlate of adolescent wellbeing.

Furthermore, the difference between the results from the predictors of mental health problems and the results from the comparison of adolescents from clinical and community settings leads to criticism of the methods used to analyze this study's research question. As seen above, while both family functioning and family communication did not predict mental health problems in adolescents from both clinical and community settings when Logistic regression was used, significant differences were found between the sample groups and these family factors when Mann-Whitney tests were used. One explanation of this may be due to the fact that socio-demographic characteristics were not included in the regression model and this may be impact the outcome. Several socio-demographic variables such as age, and socio-economic status, may act as underlying mechanisms between the association of family and adolescent mental health. When Muyibi, Ajayi, Irabor and Ladipo (2010) examined the association between family functioning and adolescent behavioural problems, they found that most dysfunctional families with adolescents with behavioural problems were from low social classes. This implies that economic power contributes to the functionality of the family. Consequently, there are factors that interfere with the association between family adolescents' emotional and behavioural problems that need further investigation in order to help us understand better the impact of the family on adolescent mental health.

Considering all three family factors together, it seems that in Cypriot families, functioning and communication are not as important as attachment, if we take into account the results revealed by the Logistic Regression model. As Cypriot culture is conservative, emotional bonding between parents and adolescents could be described as "a feeling of love" and "special" where emphasis is given to the emotional support provided by parents. This replicates cross-cultural studies on attachment, which have shown that attachment was significantly lower in less conservative countries compared to more traditional ones (Lewicka, 2005). As argued by Bakermans-Kranenburg, van IJzendoorn and Kroonenberg (2005), attachment is related to the demands of the cultural environment. Thus, there is a cultural explanation of this. Cyprus is a small community, where there is a close relationship between children and their parents and an intensive focus on developing emotional bonding between parents and the child, and so adolescents interpret family by the way they are attached to their parents rather than also focusing on the availability and accessibility of daily emotional parenting support or openness in parent-adolescent communication.

6.5.1. Limitations

Several limitations of this study should be mentioned. As the sample was relatively small and non-normally distributed, limits occurred in the types of analyses that can be carried out (i.e. non-parametric tests). While parametric tests involve specific probability distribution, non-parametric tests involve fewer assumptions that affect the significance of their results (Field, 2009). Thus, non-parametric tests provide less ability by which to generalize the results. However, it is good to bear in mind that Cyprus has also a small population with few cases of clinically referred adolescents.

Furthermore, the use of logistic regression is a robust method for investigating predictors of mental health problems between adolescents from clinical and community settings. Therefore, one should be skeptical of the way the results could be interpreted, especially in cases where the findings of the test did not support our hypothesis. In addition, the findings of this study were based on self-report measurements from a single informant, the adolescent. Thus, it is crucial to observe parents' views of their attachment with their offspring and the way the family functions and communicates in order to get a clearer view of the association between family and adolescents' psychopathology and to test the utility of these findings.

6.5.2. Future Recommendations

Considering the limitations of the present study, there are many rich ideas for further research. Although the scales for examining family factors have been validated in terms of their relationship with measures of adolescent psychopathology, there is a need to observe the association between the family and adolescent mental health through the interview data in order to explore the findings of this study in greater depth and a better understanding of family processes that adolescents may not fully recognize within a self-report scale. In addition, it is also important to assess multiple aspects of the social environment such as school and peers in order to adequately explain and understand adolescent behavioural and mental health problems. Given this, future studies also need to examine factors such as problem solving skills, a strong interest outside the family or the presence of a confiding adult outside the family and temperament during adolescence, which have been found to protect young people from developing psychopathological problems (Hakim-Larson & Essau, 1999).

6.6. Conclusion

Taken together, the findings of this study suggest that the family environment should be considered as a crucial aspect in the development of adolescent mental health problems. While adolescents from a clinical setting differ significantly from adolescents from a community setting in the way they experience and perceive their family environment and their relationship with their parents, attachment was found to be the strongest predictor that could both distinguish the two sample groups and predict the existence of mental health problems. This finding indicates that attachment plays a more crucial role in adolescent mental health problems compared to family functioning and family communication, a finding that further reflects results from Chapter 5. Since family is a shelter which provides concern and emotional support for most adolescents in Cyprus where mutuality, harmony and parental concern in the family are valued and treasured by the adolescents, providing attention to attachment as well as considering and improving difficulties in communication and functioning may contribute to a decrease in adolescent psychopathology.

CHAPTER 7: WHAT REALLY MATTERS? EXPLORING ADOLESCENT-PARENT RELATIONSHIPS: A QUALITATIVE STUDY COMPARING CLINICAL AND NON-CLINICAL FAMILIES (STUDY 3)

7.1. Overview

In Chapters 5 and 6, the family has been shown to be an important factor in the development of emotional and behavioural problems in adolescents if we consider the significant differences that occur in all the family factors (attachment, communication and functioning) assessed between adolescents from community and clinical settings. In particular, attachment was found to significantly predict mental health problems in adolescents from both community and clinical settings. Therefore, this qualitative study was designed to better understand the association between family and adolescent mental health problems, aiming to explore in depth the relationship between adolescents and their parents from both community and clinical settings.

7.2. Introduction

The findings from Chapters 5 and 6 were inconsistent with the hypothesis of the Thesis that family factors (i.e. attachment, family communication and family functioning) will predict adolescent mental health problems from both community and clinical settings. The results revealed that, even though there were significant differences in the way families from community and clinical settings function and communicate, regression analyses showed that only attachment significantly predicted

adolescents' mental health. These findings were also inconsistent with previous research indicating that functioning and communication within the family environment are crucial components of adolescent mental health (Allison, et al., 2003; Bogels & Benchman-Toussaint, 2006; Claveirole & Gaughan, 2011; Friedmann, et al., 1997).

As the questionnaires used in Chapters 5 and 6 to assess family factors (i.e. IPPA and FACES) were originally developed in relation to American culture and had never been used in Cyprus before, some questions included in them may not reflect Cypriot culture. Although analyses showed them to be reliable and valid to my studies (Sections 4.3.4 and 5.3.4), they may not have covered all aspects of the family that are specific to Cypriot culture and, as a result, this impacted the findings. So, in order to uncover Cypriot parenting styles and family dynamics, this qualitative study was developed.

The family is a basic unit that has deep roots in both Cypriot national culture and religious belief. It suggests loving, belonging, bringing up and coexisting, as well as, safety, security and unity. The family can be where potential resources for health or possible threats to wellbeing may arise. The core functions of the family are the exchange of love, affection, comprehension and care, a sense of identity and belonging, and guidance on social values (Bomar, 2004). Thus, the family has a fundamental role in many aspects of the health of adolescents.

There is a significant body of research that has analyzed adolescent-parent relationships with regard to adolescent mental health (Page, 2001; Reid, et al., 2002). Adolescents are influenced by the quality of relationships with their parents, as so many feelings toward the child are communicated in the course of the relationships (Steinberg, 1990). In the literature on the quality of adolescent-parent relationships, several

indicators arise, including parental style and behaviour, such as control and monitoring, attachment (Gallarin, et al., 2012), communication and everyday implementation (Maenle, & Herringshaw, 2007). On the one hand, the closeness of adolescent-parent relationships has been found to explain the beneficial effect of parental involvement in adolescents' lives, which act as protective factors against the development of mental health problems (Chao, 2001). However, on the other hand, in a study by Dekovic, Janssens, and Van As (2003), the results revealed that the quality of adolescent-parent relationships explained adolescent antisocial behaviour.

Parvizy and Ahmadi (2009) conducted a qualitative study in order to explore the perspective of Iranian adolescents on issues of family and their health. Their findings suggested that effective parenting (where parents provide warmth and support to their children) was significantly mentioned by their participants as a positive factor towards their health. Living in a secure and warm environment in the house, avoiding family conflicts and being kind to the child were some indications made by participants as factors against the development of any emotional and physical problems.

Exploring further the outcomes of adolescent-parent relationships, Yarcheski, Mohan and Yarcheski (2002) found significant differences between adolescents who reported good and poor relationships with their parents. They argued that poor adolescent-parent relationships could result in insecure attachment between the child and his/her parent. Their findings indicated negative attitudes towards life, low self-esteem and depressed symptoms in adolescents with poor parental relationships (Yarcheski, et al., 2002). In this respect, attachment is a crucial component in the adolescent-parent relationship, as it provides a fundamental element of protecting the adolescent from the onset of mental health disorders (Leadbeater, et al., 1999). Given

the significance of attachment to adolescent mental health, it is important to understand further the processes occurring with attachment figures – i.e. adolescents and caregivers – in order to identify indicators of attachment that may impact mental health problems.

Furthermore, while support and warmth are found to be important pointers of a good adolescent-parent relationship (Parvizy & Ahmadi, 2009), the process of expressing feelings and exchanging information is also important, as it is in this way that we perceive the behaviour of others. Communication is essential in resolving problems and increasing the understanding of others (Berlo, 1960). Maenle and Herringshaw (2007) argued that family communication could be used to develop positive relationships in young people's lives. In a study by Gordon and Grant (1997), adolescents identified 'having people to talk and communicate with' as a cause of making them feel good and influencing their mental health in a positive way. Therefore, communication is also a critical component of family relationships.

In contrast, problematic interactions between parents and adolescents can lead to several mental health problems (Wenar & Kerig, 2005). For example, Monck and colleagues (1994) found that depression in adolescence was associated with misunderstanding. In addition, Dekovic (1999) found that the negative quality of relationships between adolescents and their parents was related to higher levels of Externalizing problems.

Both misunderstanding and the negative quality of the relationship between adolescents and their parents were found to produce conflict (Maenle & Herringshaw; Steinberg, 1990). In a qualitative analysis of interviews from adolescents and their parents, Farrell, Erwin, Allison, et al. (2007) found that a major problem of their relationships was conflict. As they argued, conflict is a major problematic situation in

adolescents' lives because they unbalance relationships with parents and thus impact on adolescents' well-being (Farrell, et al., 2007). Moreover, high levels of criticism could also lead to conflict between adolescents and their parents (Garnefski & Diekstra, 1996). Understanding why these problems make adolescents unhappy or vulnerable is a crucial component of any understanding of the causes of the development of mental health problems. Conflict is indicated to produce stress and pressure in adolescents, making them perceive parental behaviour as unsupportive and leading them to low levels of satisfaction (Farrell, et al., 2007). As such, adolescents' feeling of emotional distress was found to be a risk factor associated with emotional and behavioural problems (Garnefski & Diekstra, 1996).

The way parents approach their adolescents has a significant effect on adolescents' perceptions of the adolescent-parent relationship (Wargo, 2007). The way parents behave, as well as, the way adolescents perceive their parents' style and behavior, are important factors in the aetiology of psychiatric disorders in this age group (Henry, et al., 2006). As stated in the literature review (Chapter 3), different parental styles may have a different influence on adolescents' wellbeing. Nevertheless, what is strongly illustrated by qualitative studies, which explore the relationship between adolescents and their parents, is the fact that parental control negatively influences adolescents' lives (St George & Wilson, 2012). This can be explained by the fact that parental controlling behaviour, especially in the areas of thinking and decision-making, is linked to adolescents' feelings of alienation (Soenens & Beyers, 2012).

In addition, another aspect of adolescent-parent relationship that brings family members closer and enables them to develop better communication is family gatherings (Kiser, Bennett, Heston & Paavola, 2005). Kiser et al. (2005) argued that this dimension

delineates the family members who are involved in the routines and traditions, and builds positive connections including family communication, positive interactions, caring and support. It also helps family members to cope and solve problems that the family faces by communicating. When they evaluated family ritual and adolescent well-being, they found a strong relationship between family rituals and children's emotional and behavioural problems, with non-clinical families scoring significantly higher on the scale assessing family rituality than clinical families. Thus, Kiser et al. (2005) argued that families with clinical adolescents experience difficulties in communication compared with families with non-clinical adolescents, due to the fact that having a child with behaviour problems significantly affects family rituals and, as a result, they do not create opportunities for discussion and problem solving. This finding provided evidence that family rituals are correlated with adolescents' mental health. This is because family rituals (e.g., dinners), enable open communication in families and present opportunities for young people to discuss social and emotional issues and coping strategies (Eisenberg, Neumark-Sztainer, Fulkerson, & Story, 2008). In addition, family connections, positive interactions, caring, support and involvement, and clear roles are shaped and reinforced by the practice of family rituals characterized by repeated patterns of interaction over time (Fiese, 1996), characteristics that work against the development of mental health problems in children and adolescents (Elgar, et al., 2013).

The present Chapter builds upon previous efforts to identify the association between the family and adolescent mental health problems. It represents the final step of this Thesis' series of studies. It aims to develop a more comprehensive approach and a more integrated understanding of the impact of the adolescent-parent relationship on adolescent mental health problems. The primary goals of this Chapter are *(1) to explore adolescents' and parents' perceptions of their relationship and (2) to examine how they*

position each other in their lives within and outside the family. The aims of the present Chapter are based on the family factors (attachment, functioning and communication) assessed in the previous Chapters (Chapters 5 and 6).

To achieve the aims of this study and in order to obtain a comprehensive view of the association between family and adolescents mental health, parents' perceptions of their relationship with their adolescents were considered. As observed by Allison and colleagues (2003), the differences between parents' and adolescents' perceptions occurred especially in relation to family functioning when family influences on adolescent mental health were examined. Therefore, obtaining parental perceptions will be beneficial to understanding further the impact of the family on adolescent mental health. In addition, this study involves interviews from both community and clinical settings in order to investigate the differences between adolescent-parent relationships in both settings and to see how they relate to mental health issues.

7.3. Methods

7.3.1. Design

A *qualitative approach* was used in this study. Qualitative research was preferred as the study aims to explore in depth the way adolescents perceive their relationship with their parents and is concerned about the quality and the texture of adolescents' experiences. As argued by Boswell and Cannon (2007), a qualitative method is the most suitable for uncovering human relationships and what lies behind them. Separate semi-structured interviews were conducted for clinical and non-clinical adolescents and their parents in order to obtain a more complete picture of the

adolescent-parent relationship and its impact on the development of mental health problems.

7.3.2. Participants

A total of *40 interviews* were conducted: *10 adolescents from each setting and one of their parents*. Adolescents from both community and clinical samples were subgroups of the previous Chapters (Chapter 5 and Chapter 6). The adolescents from the community sample were recruited from state schools, while those from the clinical sample were recruited from the state child and adolescent mental health services. Adolescents were between 12 and 17 years of age and resided in the two largest cities in Cyprus (Nicosia and Limassol). One parent of each adolescent also participated in the study. In total, 19 mothers (10 of clinically referred adolescents and 9 of non-clinical adolescents) and one father (of a non-clinical adolescent) were recruited.

The approach to sampling did not specifically strive to recruit a nationally representative sample but rather a sample of adolescents and their parents from different settings (community and clinical settings) to facilitate the exploration and representation of a range of parent-child relationships, which were not covered using the quantitative method in the Chapters 5 and Chapter 6. Initially, consent forms from the previous Chapters included a section where the participants were asked to provide a contact number if they were interested in another study that involved an in-depth interview about their interaction with their parents. A random sample of those who agreed to participate was selected. Subject to the agreement of the participants, the interviews were audio recorded, and the text transcribed for analysis. The interviews were conducted until data saturation. According to Polit and Beck (2006), data is considered

saturated when categories in the data become repetitive and redundant, and when the researcher is no longer hearing or seeing new information.

7.3.3. Interview Schedule

The interview schedules used for both adolescents (Appendix XVIII) and their parents (Appendix XIX) included a *semi-structured format* to ensure an appropriate consistency of data collection and to provide the opportunity for the participants to explore issues. The structure and the content of the interviews were influenced by the findings of Chapters 4 and 5. The interviews were designed to explore issues relevant to the adolescents' relationships with their parents and vice versa for the parents, and to enable them to describe the way in which it affects them.

Specifically, interview schedules for both adolescents and their parents contained nine open-ended questions covering numerous aspects of the adolescent-parent relationship, such as attachment, family functioning and family communication. The interview schedules started with a general question about the way parents raise their adolescents, and vice versa for adolescents. In this section, the questions referred to adolescent-parent interactions on several aspects associated with the family environment such as decision-making. For example, in both the adolescents' and parents' interview schedules, there was a question "How do you take decisions as a family?" In the following section of the interview, there were questions related to attachment between adolescents and their parents. For example, in the adolescents' interview, the questions were "If you have a problem, do you discuss it with your parents?", and "Can you please describe your relationship with your parents, each one separately?" In contrast, in the parents' interview, the questions were "How do you

think that trust works between you and your child" and "Can you describe your relationship with your child?" One question on peer relationships was added to the last section of the interviews in order to explore the influence of the adolescent-parent relationship on adolescents' lives outside the family. For example, adolescents were asked to describe their peer relationships while parents were asked to provide their opinion about their adolescents' peer relationships. The questions were developed in a way that allowed the participants to develop the discussion. The interview schedules were amended appropriately for all participants recruited.

7.3.4. Procedure

Following agreement with both parents and their children, each interview took place in a quiet public place in Nicosia and Limassol. Generally, the interviews took 20-30 minutes each. Adolescents and their parents were interviewed separately.

During the interview, the participants were first asked to read the information sheet, sign and return their consent form (Appendix XV and Appendix XVI). Receipt of a signed parental consent form was needed for the adolescents, as without their parents' permission, they were not allowed to participate. The interviewer confirmed that they were willing to let the interview be recorded. They were also informed that they had the opportunity to opt out of the study at any time without providing a reason. It was acknowledged that the interview was confidential and would only be used for research purposes. In addition, it was explained to them that, in the event of disclosure or upset (e.g., if the adolescent felt uncomfortable or upset about answering a question), their parent/guardian would be informed. The same procedure was employed for interviewing parents. At the end of their participation a debrief form was given

(Appendix XVII). After each recorded interview, the text was transcribed and the data (recordings and transcripts) securely stored in locked filing cabinets at the University of Roehampton. The participants were given unique study numbers so that only a record number could be linked with their data and thus complete confidentiality was assured. The study conformed to current ethical standards, as confirmed by the Research Ethics Committee of the University of Roehampton (Appendix XIV).

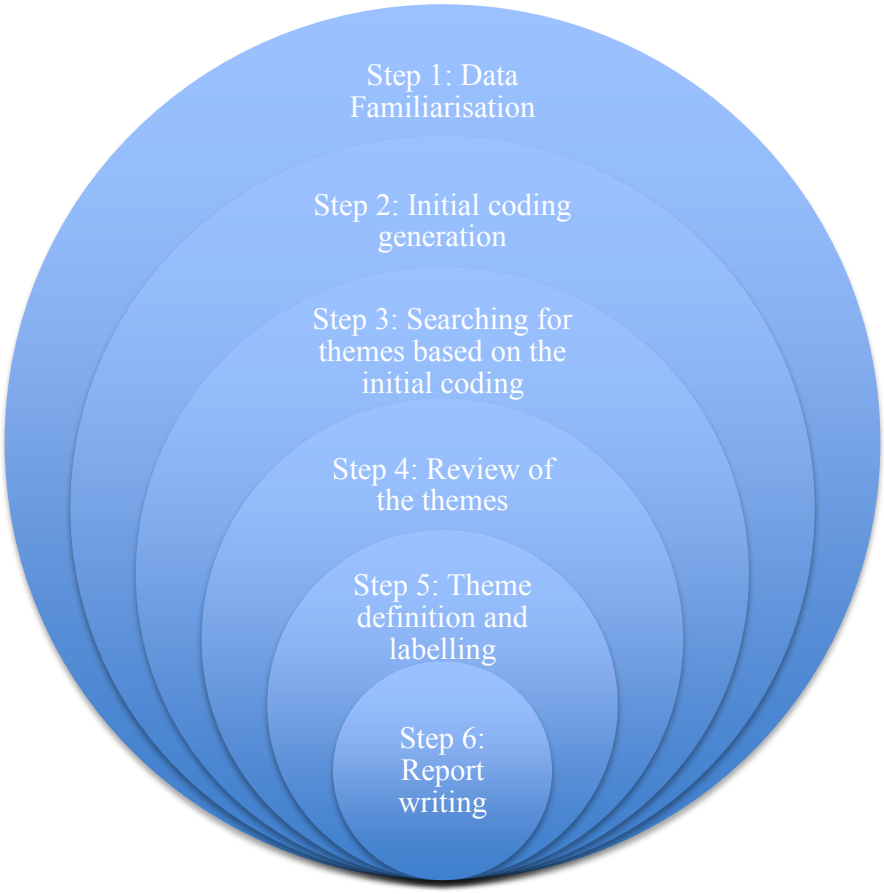
7.3.5. Analytic Process

The interview data was analyzed using thematic analysis. *Thematic analysis*, as described by Fereday and Muir-Cochrane (2006), involves a search for themes that appear as important to the description of the research questions. It is a widely- used qualitative method, which identifies, analyses and reports patterns within data (Braun and Clarke, 2006) and therefore creates a form of pattern recognition within the data (Fereday & Muir-Cochrane, 2006).

The six phases of thematic analysis, developed by Braun and Clarke (2006), were applied in the current Chapter (Figure 7.1). First, the tapes were fully transcribed by the researcher. Second, a detailed reading and preliminary coding of the data, on a line-by-line basis, was conducted to identify different concepts. Each concept was written on a card with a short quotation from the interview that was relevant to it. As the interviews had been carried out in Greek, at this stage of the analysis concepts were developed in English and the researcher translated the quotes that were relevant to the concepts. The aim of this stage was not to record every instance of a concept but to include examples that added further meaning to the concept. A provisional list of codes (N=49) was drawn up, and they would be redefined or discarded as further analysis took

place. Once the coding of concepts had finished, the concepts were refined by checking the cards against the transcripts. Definitions were then written for the concepts in order to note a link between them and to generate the main themes.

Figure 7.1: Braun's and Clarke's (2006) six steps of Thematic Analysis



Note: No linear relationship between the steps. All steps may refer forwards and backwards to each other.

Searching and reviewing the themes entailed the construction of several thematic maps in order to identify the relationship between potential themes and potential codes. At the end of this stage, there were six themes for both clinical and non-clinical families and 38 separate codes were developed, based primary on the main

themes and questions of the semi-structured interviews. Finally, the themes were refined again with the entire data in order to confirm that the themes captured the data and fitted the overall analysis and research questions. The analysis was conducted at the latent level, aiming for underlying ideas, assumptions and patterns within the data.

One limitation of any qualitative research is the level of the researcher's own perspective and approach (Howitt, 2010), As argued by Dallos and Vetere (2005), to ensure the validity of a qualitative study, the researcher's perspective has to be clearly understood by others. In order to check the validity of this study, a colleague was conferred with to obtain a robust set of findings, after the first draft of analysis made by the researcher. This triangulation ensured that analysis was not biased by the researcher's own predispositions. In addition, it is also important to ensure that findings have confirmability. To ensure this, inter-rater agreements were examined by the researcher who carried out the interviews (CD) and a second colleague not involved in this project, indicating a reliable coding system.

7.3.5.1. Thematic Over Other Qualitative Methods

Even though the coding practices of this study are similar to those used in grounded theory, grounded theory approach's main thrust is to generate theories regarding social phenomena and to develop higher level understanding that is "grounded" in, or derived from data (Glaser & Strauss, 1967), and thus it does not fit to the purposes of this research. In grounded theory, researchers approach the question with disciplinary interests and background assumptions, and they use an iterative study design, theoretical (purposive) sampling and, to varying degrees, a systematic method of analysis (Pidgeon & Henwood, 1996). Additionally, while grounded theory is

"bottom-up" where issues emerge from, rather than become imposed upon, the data (Pidgeon & Henwood, 1996), the manner in which thematic analysis is applied is made explicit and transparent and can be either data- or theory- driven (Braun & Clarke, 2006).

In addition, thematic analysis also differs from other qualitative methods such as narrative (Riessman, 1994) and discourse analyses (Potter & Wetherell, 1987). Narrative analysis is particularly concerned with life-histories of people and is best suited to interviews which are rich in autobiographical content and research questions that are concerned with how people make sense of their lives. Discourse analysis focuses on how talk constructs reality and is therefore most appropriate for research questions concerning how reality is constructed in and through talk rather than for investigating how verbal accounts may map underlying cognitions (Howitt, 2010). For these reasons, these analyses were considered as inappropriate to be used for this thesis.

Therefore, based on the aim of the qualitative research (i.e. understanding mechanisms of the adolescent-parent relationships that may impact adolescent mental health problems), thematic analysis was most appropriate, as the semi-structured interviews intended that the analysis should not be bottom-up and should allow themes relating to the perceptions of adolescents and their parents be observed.

7.4. Results

For the purposes of this study, two separate thematic analyses were contacted, one for a community setting and one for a clinical setting. Subsequently, the results were divided into two sections: a) themes developed from participants (both adolescents

and their parents) from the community setting and b) themes developed from participants (both adolescents and their parents) from the clinical setting.

Please note that the word "offspring" in this Thesis means "adolescents". The terms "clinical" and "non-clinical" families were used to describe adolescents and their parents from either the community or the clinical setting. Quoted words and phrases from the participants were used to support the findings. The translation, from Greek to English was made as close as possible to the simple language used by participants. Thus, the quotes were included in a Greek-English word base translation in order to fit with the original recorded interview.

Before presenting the outcomes of the thematic analyses, the adolescents' demographic information is listed (Table 7.1 and Table 7.2). Ten boys and ten girls participated in this study. In both the clinical and community settings, all the interviews were carried out with the mother, except for one with a father from the community setting. It is also important to note that five out of the ten adolescents from the clinical setting were from divorced families, all living with their mothers.

Table 7.1: Demographic information of adolescents from the community setting (n=10)

Pseudonym	Gender	Age	Parental Participation	Living with
Participant 1	Boy	14	Mother	Biological mother and biological father
Participant 2	Girl	15	Father	Biological mother and biological father
Participant 3	Boy	13	Mother	Biological mother and biological father
Participant 4	Girl	13	Mother	Biological mother and biological father
Participant 5	Girl	16	Mother	Biological mother and biological father
Participant 6	Girl	12	Mother	Biological mother and biological father
Participant 7	Boy	16	Mother	Biological mother and biological father
Participant 8	Boy	13	Mother	Biological mother and biological father
Participant 9	Girl	16	Mother	Biological mother and biological father
Participant 10	Girl	14	Mother	Biological mother and biological father

Table 7.2: Demographic information of adolescents from the clinical setting (n=10)

Pseudonym	Gender	Age	Parental Participation	Living with
Participant 1	Boy	16	Mother	Biological mother
Participant 2	Girl	15	Mother	Biological mother
Participant 3	Boy	12	Mother	Biological mother
Participant 4	Boy	15	Mother	Biological mother and biological father
Participant 5	Boy	13	Mother	Biological mother and biological father
Participant 6	Girl	16	Mother	Biological mother
Participant 7	Boy	14	Mother	Biological mother and biological father
Participant 8	Boy	13	Mother	Biological mother and biological father
Participant 9	Girl	16	Mother	Biological mother
Participant 10	Girl	17	Mother	Biological mother and biological father

Different themes were revealed from the community and clinical samples, indicating crucial differences on how adolescents perceive their relationships with their parents between adolescents from clinical and community settings. In the community setting, two broad themes were identified: the quality of the adolescent-parent relationship (emotional support and responsiveness, trust, adolescent' problem solving, adolescent' school performance and career, and quality vs. quantity time) and the quality of adolescent' social life (importance of peer relationships and active parental involvement in adolescent' social life) (Figure 7.2). In terms of the analysis from participants from the clinical setting, three broad themes were revealed: adolescent interpersonal problems (negative view of self, emotional dysregulation and worry), an unbalanced adolescent-parent relationship (responsiveness vs. rejection, lack of trust, inability of adolescents to solve their problems and conflicts) and adolescent problematic social life (antisocial behaviour and authoritarian control in adolescent' social life) (Figure 7.3). Each theme is discussed below with quotes used to illustrate the meaning of each aspect of the adolescent-parent relationship.

Figure 7.2: Schematic presentation of broad themes and themes from families from community setting

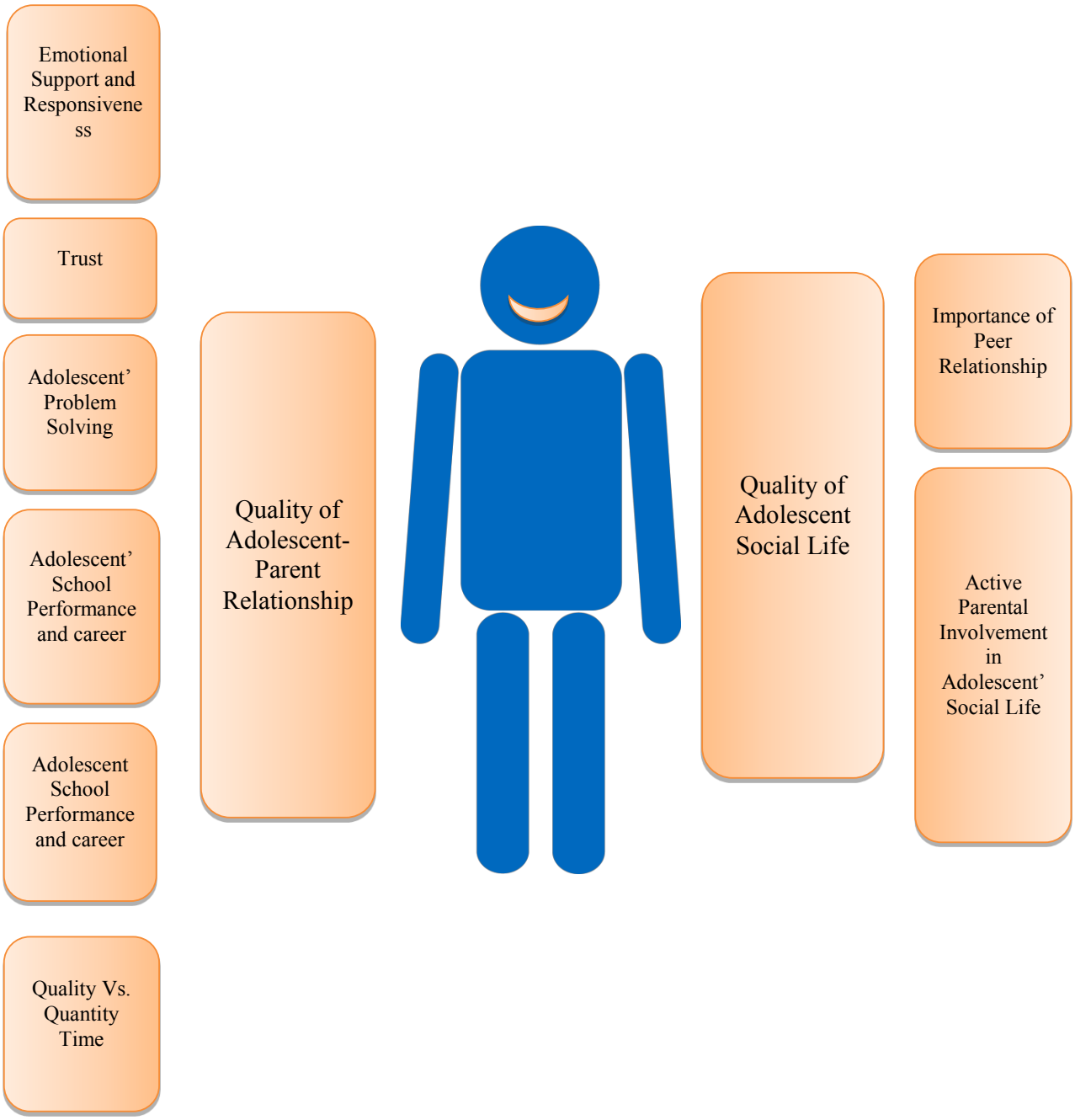
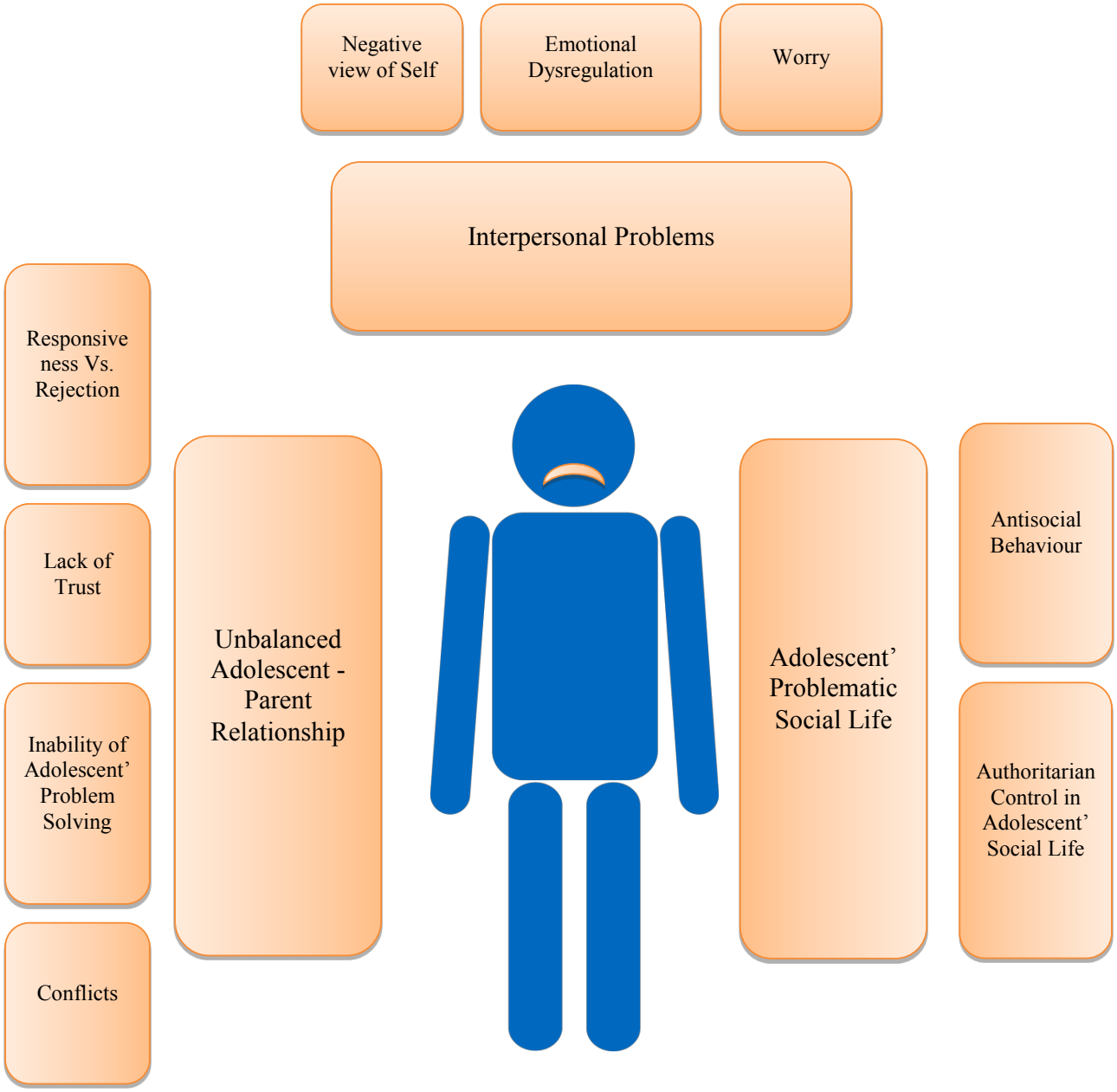


Figure 7.3: Schematic presentation of broad themes and themes from families from clinical setting



7.4.1. Families from the Community Setting

7.4.1.1. Broad Theme 1: Quality of the Adolescent-Parent Relationship

The first broad theme was the perceived aspects of the quality of the parent-child relationship, which is related to the closeness of the parent-child relationship as well as their communication and their supportiveness. Specifically, it is referred to five themes: (a) the emotional support and responsiveness parents provide to adolescents, (b) the trust that exist between them, (c) whether or not adolescents ask their parents for help when they face a problem, (d) adolescents' openness to parental involvement in their school performance, which is also linked to their career aspirations, and (e) the fact that the quality of time adolescents spend with their parents balances the quantity of this time (Table 7.3).

*Table 7.3: Summary of broad theme 1 "**Quality of the Adolescent-Parent Relationship**" from families from the community setting*

Adolescents' point of view	Themes	Parents' point of view
	Emotional support and responsiveness	
Close relationships		Close and supportive relationships
Express feelings and emotions		Showing affection
Their voices are heard		Communicate well – listening
Closer relationship with mother than father		Provide emotional support
	Trust	
Trust their parents		Trust their adolescents
Expose their vulnerability without being criticized		Build trust for protecting and helping them
	Adolescents' problem solving	
Independence/ Solve problems on their own		Problems accepted
Sometimes asking parental opinion		Adolescents sometimes do not share their problems
	Adolescents' school performance and career	
Independence		Demanding
Ambitious about themselves		Control
Area of arguments with parents		Take the lead
	Quality vs. quantity time	
Not spending much time with parents		Too busy
Letting their relationship down		Time pressure
Distant from father		Importance of quality of time

7.4.1.1.1. Theme 1a: Emotional Support and Responsiveness

One important indication that was addressed by the participants was the way they respond to each other feelings, emotions and needs, and the support they provide to each other.

Most of the adolescents (8 out of 10) described their relationship with their parents as close, where they are able to discuss their problems with their parents, express their feelings and emotions and get help when needed. It was common in their interviews to see comments like *"My parents show me affection and love"* or *"I love my parents"*

"My parents take care of me… we have a good relationship. I can talk to them, I can express myself to them, and they always help me." (Community Sample, Girl, 16 years old)

"We are close to each other. We discuss my problems whenever I have them… Both my parents are close to me. I have them when I need them." (Community Sample, Girl, 12 years old)

Two boys took this a step further, indicating that being able to express themselves was also seen as the *"right thing"*. It is a way of making them improve their relationship with their parents and feel that they belong to their family. As stated by some of the adolescents, parental responsiveness to adolescents' expressions in the family is a significant predictor of a "better relationship" (as mentioned by a girl) because it gives them the feeling of being part of the family:

"What is important in my family is the fact that we express ourselves, we support each other and it's the right thing to do. This makes us improve our relationship." (Community Sample, Boy, 13 years old)

"When I want to say something, I express myself and they accept my opinion… I tell them when I don't like something in their behaviour in order to change it and they change it sometimes… and I like this because I feel that I am an equal member of the family." (Community sample, Boy 13 years old)

In addition to the above point, more than half of the adolescents pointed out that their voice is heard in family discussions and family decision-making. A few of the adolescents who talk about family decision-making also used the word *"democracy"* to describe how decisions are made in the family: *"Democracy that shows respect for the family members' opinion"* as they also said. These two aspects of the adolescent-parent relationship (being involved in decision-making and feeling that their parents respect their feelings and their opinions), as described by adolescents, are very important as they make them feel, firstly, closer to their parents and, secondly, active members of the family environment.

"Before taking any decision in the house, we will all sit down together, discuss and then decide. Basically, there is democracy in our discussion. Everybody expresses an opinion and slowly we will take the right decision for all of us." (Community Sample, Boy 14 years old)

Having noted the support that adolescents receive from their parents, adolescents have a different relationship with their mother than with their father. Most of them (9 out of 10) indicated that they have a closer relationship with their mother than with their

father; only one boy stated that he had a better relationship with his father. The reason for this close relationship with the father is that they share the same interests and, he said, his father can understand him better than his mother. The rest of the adolescents, who reported having a closer relationship with their mothers, perceived their mothers as being better able to listen to and understand them. They also stated that their mothers seemed to be more approachable, while their fathers were more distant:

"With my mother, we are more like friends but with my father it's different. Sometimes we have this child-father relationship… The father is always a bit more distant and strict with his decisions." (Community Sample, Boy 13 years old)

"My mother is the person at home whom I can talk to about something that's bothering me. She'll sit down and talk to me and she'll understand me." (Community sample, Girl, 13 years old)

Exploring the emotional support and responsiveness from the parents' point of view, parents perceive their relationship with their offspring as close and supportive. Showing affection, communicating and being able to talk to them are some of the aspects that parents pointed out:

"There is a connection between us. She will come and talk to me, she is not afraid to come and talk to me… We understand each other. When I am not feeling well, she'll come and ask me if I need any help and I do the same for her. When I see that she is not feeling well I'll go and ask her." (Community Sample, Parent 5)

"I am very attached to my daughter. I show her my love, I hug her and she does the same with me too." (Community Sample, Parent 6)

Parents also made comments about the importance of providing emotional support to their adolescents. As one parent mentioned, *"I will never let my child suffer."* This expression shows the importance of being able to stand next to your child by providing him/her support. It appeared quite strongly in the parents' interviews that they want their children to feel confident to discuss their emotions and problems with them, and at the same time to feel that, as members of a family, they are able to express themselves and give their opinions:

"I discuss everything with my son. I am always there for him. When he has a question about anything, new things that he may be facing, anything that he feels, we talk about it." (Community Sample, Parent 3)

"We feel confident to express ourselves at home… she always has an opinion. Whatever happens at home, with any decision we have to take, she has an opinion, and I want her to have one." (Community Sample, Parent 2)

In addition, almost all mothers (9 out of 10) who participated in this study indicated that their adolescents are more attached to them compared to their father:

"I have a very close relationship with my son. We communicate a lot but with his father things are different. They do not communicate much." (Community Sample, Parent 8)

"She has closer relationship with me than with her father. She is rather afraid of him, which is why she comes first to me… Her father is a bit negative with her." (Community Sample, Parent 9)

As seen above, mothers perceive the father-child relationship as distant and detached, while the father participant perceived his relationship with his daughter as very close. In addition, mothers not only described their own relationship with their offspring but they were also able to describe the father-child relationship, just as the adolescents described their relationship with both parents even though they were referring more to their mothers due to the fact that they have closer relationship with them. This indicates that there is engagement among the family members that makes them able to perceive different relationships within their family environment.

7.4.1.1.2. Theme 1b: Trust

Another perceived aspect of the quality of parent-adolescent relationship is trust. According to one parent:

"Trust is the main thing for me. That's why I talk to my children… Now they are young and they don't have big problems. But later on, when they're older and they go out into the world, there are so many other things and whatever they do, even if it is something bad, I want them at least to be able to talk to me so that I can help them solve the situation… because I am there for them and I don't want them to find other ways of solving their problems." (Community Sample, Parent 8)

The importance of trust between adolescents and their parents was mentioned in all the interviews and it emerged as a dominant sub-theme. All the community samples made positive comments about trust. Considering their comments, it can be argued that there is two-way trust in families from the community sample, bringing out the fact that both adolescents and their parents trust each other.

From the adolescents' point of view, trust is an important factor in their relationship with their parents. One girl stated, *"Trust is a very good thing"*. All the adolescents indicated that they trust their parents and they explained trust as a way in which they can expose their vulnerabilities to their parents, without the latter taking advantage of their openness:

"The only people who will never betray me are my parents. I know that whatever I say to them will stay between us." (Community, Girl 16 years old)

"There is nobody that I trust more than my mother and my father." (Community Sample, Boy 16 years old)

From the parents' point of view, trust is something that they try to build with their children in order to protect them and to be able to help them with any problem. A few parents (4 out of 10) referred to trust by mentioning that their child shares personal issues and problems with them, while others (5 out of 10) referred to trust by saying that their children don't lie to them about when they go out, where they are, what they are doing and with whom. More than half of them indicated that they trust their children, while the rest who do not trust their adolescents noted that it is because they catch them out. However, as the parents pointed out, there are several ways in which trust can be achieved, such as avoiding arguments and criticism regarding issues that adolescents may face, proving to the adolescent that whatever they say stays between them, and encouraging them to share emotions, feelings and problems.

"I trust my child and I know that she trusts me too. And I am very happy about this because it was hard, quite hard to make her trust me at this age. This is the age where she kind of trusts her friends more. I dealt with this by never arguing with her

about her point of view about anything or even about her friends. I just express my opinion, which, of course, I back up with arguments, and then I leave her alone to think and decide whether I am right or wrong. I did this one, two, three times until she realized that she could trust me because I only wanted to help her and not to criticize her." (Community Sample, Parent 2)

7.4.1.1.3. Theme 1c: Adolescent' Problem Solving

Even though almost all adolescents have effective discussion, trust and perceived support from their parents, more than half of the adolescents from the community sample indicated that they were trying to solve their problems on their own, especially their personal issues. Problem solving and implementing their own solutions are a way of building confidence and self-esteem. They expressed the view that they are able to solve their problems, as they *"have the skills and the knowledge to do it"*. If parental involvement is needed, they are encouraged to request it. As the adolescents mentioned in their interviews, their parents are very open to hearing and accepting their problems and they are also willing to help them. However, it was clear as well that parents were only helping them to solve their problems, and not solving them on their behalf.

"When I have a problem, especially something personal, I try to solve it on my own. If I can't or if it is something really really big and difficult, I'll ask them and discuss it with them to see what they can do." (Community Sample, Boy 14 years old)

Their problems seem to be accepted by their parents. Although they are not so open to ask for parental help on personal issues, through the parents' interviews, it can

be seen that there is an acceptance of any problem that their children have and a willingness to help:

"My daughter knows that there is always a solution to her problems and her parents will help her solve it if she wants them to help. Since she was a child, I have always told her that no matter how serious the problem is, there is no problem that can't be solved. And I think that I think I have a positive and accepting approach towards her problems." (Community Sample, Parent 7)

7.4.1.1.4. Theme 1d: Adolescents' School Performance and Career

School performance is an issue that was addressed by many parents. Parents participate in their adolescents' education, provide ideas and feedback, and lobby to be included in decision making. They reinforce the schools' and teachers' missions at home. However, parental demand for school performance was found to be a key element for many parents. They push their children to study more, even though they realize the effort that is being made:

"The only thing that I ask from her is to be OK with her studies. She is allowed to do whatever she wants but first she has to finish her homework. She is the only one who knows when she is done, but if she lies to me in order to go out, she also knows that she is lying to herself. And she will realize it, either when she comes back from her friend's place and continues studying until late at night or when she gets some disappointing grades… I am not saying she doesn't try. She does. But I know she can do much better." (Community Parent 2)

In addition, parents try to take the lead and control as much as they can. Most parents stated that they want their children to have a performance in academic subjects that is well above average in order to obtain a place at university.

Nevertheless, the adolescents present themselves as somewhat more independent when referring to their studies and school performance:

"I don't want my parents to be involved in my studying. I know what I am doing. Of course I will tell them or show them my grades at the end of term but that's it. I can't go through the experience anymore where every day they have to check if I have finished my homework. They complain a lot about it and they always want me to study a bit more." (Community Sample, Girl 16 years old)

Many of the adolescents, who mentioned school performance in their interviews, also stated their ambition towards career development. They said that they take their own decisions about what subjects that they will opt for at school based on the career they want to follow. They also mentioned arguments that they have with their parents in relation to their career, as they sometimes have different opinions about what is good for them, but again, they present themselves as independent, with them taking any final decisions.

7.4.1.1.5. Theme 1e: Quality vs. Quantity Time

About a third of the adolescents interviewed in the community setting reported not being able to spend as much time with their parents as they would like. As they stated in their interviews, their parents' work schedule or workload were the reasons

why they couldn't spend as much time as they wanted with them. This lack of accessibility was seen as situation, which was not letting them build the relationship that they wanted to have with their parents:

"It annoys me that they work so many hours and they are not home with me, so I can't have them there every time I need them" (Community Sample, Girl 14 years old)

In addition, a lack of accessibility may also be the reason why some adolescents have more distant relationship with their fathers. However, one boy also described mother's lack of accessibility. He stated that he had a closer relationship with his father because mother is always out and she also works every afternoon. Thus, he spent more of his free time with his father and this brought them closer. Additionally, one girl pointed out that:

"My father cannot support me because he never has the time to talk to me, so I think he may not be able to help me. And this is because he works too much. For example, I may not see my father one day because he may come home from work at night and it may be my bedtime… and because of this I don't think that we are close to each other." (Community sample, Girl 13 years old)

This issue is something that also parents realise. Whether busy with the demands of their own work or their children's activities, many parents seem to be constantly busy and struggle to do everything. It emerged strongly from a few parents in the community setting that time pressure indirectly causes stress to them through its impact on the adolescents. Time pressure places demands on parents, both in terms of taking adolescents to and from activities and in supervising them during those activities.

"We are so busy with our work that sometimes we don't have the time that we want to spend it with our child. I know that she does not like this and this maybe makes her unhappy." (Community Sample, Parent 5)

Despite the fact that parents are sometimes not accessible to their adolescents, their relationship is balanced with the activities that they organize and the quality of the time they have together. Adolescents' narratives of their experiences of family activities overlap their problem of accessibility of their parents:

"I may not like the fact that we have only one day per week when we are doing things all together, but when we do something we have a really good time and it is very nice." (Community Sample, Girl 13 years old)

"My parents are very busy so we have only Sundays when we usually organize trips out or we may go to a restaurant to eat or even spend our day at home playing and watching movies, but I enjoy it because we are having quality time when we are together." (Community Sample, Girl 16 years old)

The quality of the time parents spend with their adolescents was an indicator of their relationship that was described by parents as well. As parents realize that they cannot spend as much time as they want with their adolescents, they try to find effective ways of maintaining a close relationship with their children by converting the quantity of time to quality. For example, they aim to spend their free time and the weekends with their adolescents, by doing what the adolescents enjoy more. This mostly applies to those parents who pointed out that fathers don't have time to spend with their children, as they are working a lot. This way of minimizing their lack of accessibility was addressed by a parent who reported that:

"Because there is not much free time, when my husband is free we always organize something with our children, and it is our rule that all the family members have to participate in these activities. As they don't have the chance to spend time with their father every day, at least they have to be with him during the weekends, for example, in order to be able to communicate. And we always organize something that they like and they want to do. It may be the only time that we are all together but you know what I've realized? It is not only about how much time you spend with your child, it is mostly about the quality of the time that you have with them. And I am pretty confident that my daughter enjoy these times." (Community Sample, Parent 4)

7.4.1.2. Broad Theme 2: Quality of Adolescent' Social Life

The adolescent-parent relationship seems to impact on adolescents' relationships outside the family environment. It came over strongly from the interviews with both adolescents and their parents that peer relationships are influenced by the way adolescents interact with their parents, and vice versa, as both parental opinion and involvement in the adolescents' social lives count. From this perspective, the second broad theme is named "quality of adolescents' social life". This broad theme is divided into two sub-themes: (1) the importance of peer relationships and (2) active parental involvement in adolescents' social life (Table 7.4).

*Table 7.4: Summary of broad theme 2 "**Quality of Adolescent' Social Life**" for families from the community setting*

Adolescents' point of view	Themes	Parents' point of view
	Importance of peer relationships	
Friends are important		Awareness of the importance of adolescents' friendships
Sense of value		Work as guardians
Confident sharing personal issues with friends		Protection
Trust friends		
Enjoy spending time with friends		
Solve problems through discussion		
Show understanding to their friends		
	Active parental involvement in adolescents' social life	
Keep parents involved in their social life		Interacting with adolescents' friends
Asking for parents' opinion		Way of controlling adolescents' friendships
See parental involvement in their social lives as a way of building closer relationships with them		Monitoring adolescents' friendships

7.4.1.2.1. Theme 2a: Importance of Peer Relationships

In the community sample, all the adolescents signified friendships as something *"important in their lives"*. Their view of their friendships involved perceptions including a sense of value, feeling confident sharing personal issues with them, trusting their friends and enjoying spending time with their friends.

However, as expressed by a 13-year-old boy and a 14-year-old girl, relationships with their friends are not always smooth. Arguments, misunderstandings and disappointments are described as sometimes occurring between adolescents and their friends. As they stated, good relationships could be developed only if problems are solved with discussion. This approach to problems with friendship shows their ability to discuss and solve a problem as well as their willingness to show understanding towards their friends and stay connected, as friendships plays a crucial rule in their lives.

"There are some days when I really enjoy myself with my friends but there are others when I don't. I trust my friends but sometimes I feel that they have betrayed me. And this makes me really angry because we'll fight about something that is not important. But I believe that I have to fight sometimes in order to find the right friends." (Community Sample, Boy 13 years old)

In support of the adolescents' point of view, parents also pointed out their awareness of the importance of friendships during this period of their children's lives. As stated by one parent:

"*Friends are really important at this age. She is affected by her friends a lot. She counts a lot on them. She has a really good time with them. We know that sometimes she is negatively affected by them but we never judge her friends. We advise*

her and try to make her understand who is good for her and who is not. She will pass through lot of friendships before settling down with the people who deserve to her friends. This is part of the game." (Community Sample, Parent 2)

As with the parent above, most of the parents stressed their role with regard to their children's friendships. Parents see themselves as guardians regarding friends against whom they may have to protect their child when necessary but, at the same time, they have to advise him/her to be selective or to help with any problems that they face:

"Because we are living in a village, it is easy to find out information about someone. When he makes new friends, I always ask him to bring them home in order to meet them but at the same time I ask around to find out if he is a good child… just to be ahead of them without them knowing it." (Community Sample, Parent 3)

"It is my role to know his friends and their parents. I want to see their character for myself and know where they come from in order to be able to protect my child… I want to see if they have the same values as the ones that I have taught my son." (Community Sample, Parent 7)

7.4.1.2.2. Theme 2b: Active Parental Involvement in Adolescent' Social Life

Interacting with their adolescent children's friends is not only a way of controlling or protecting the child but also of being involved in the adolescents' social life and showing them trust and support in areas outside the family. This is something that emerged strongly from the interviews with both adolescents and their parents from the community setting.

Adolescents seem to keep their parents involved in their social life by asking them to express their opinion or by discussing any problems they may have with their friends. They also mentioned that they like the fact that their parents are involved and aware of what is going on in their social life. This makes them feel more connected to their parents. An example of one adolescent's desire for parental involvement in his social life is provided by the following extract:

"My parents always express their opinion about my friends. They tell me when they like somebody or not and sometimes they may tell me to be careful because he is a 'bad influence'... I always aim to introduce them to my friends... I want them to know what's going on in my life and as my friends are part of my life they should know... However, I don't want them to be too involved." (Community Sample, Boy 16 years old)

From the parents' viewpoint, their involvement in their adolescents' social life is an important component. They stated that it is a way of observing their offspring's behaviour and supervising them wherever needed in order to help them build the social skills that will be necessary at a later stage of their lives. In addition, most of the parents also mentioned that they try to control their adolescent children's friendships and they see this as a way of protecting their children. Controlling and monitoring adolescent friendships was a strong indicator of parental approach towards adolescents' social lives. A way of achieving this is through their involvement in adolescents' social lives. Being able to meet and approach their children's friends helps them build their own opinion about friends and this helps them understand whether or not their child is in danger. Thus almost all parents stated in their interviews that their children are allowed to bring their friends home, and, as parents, they also try to interact with them when their children are around:

"Of course as a parent you want to know your child's friends and to control a bit, to protect. How we do this? We bring everybody to our home. When they need a place to party, it will be at our house. Her friends are coming over all the time and sometimes they sleep over. And what do I do? I interact with them. I will sit with them, play with them, cook for them, make jokes with them. And when I've seen them few times, I can understand if he or she is good or bad influence." (Community Sample, Parent 2)

"Knowing his friends, asking him how he feels about his friends, asking him if he has any problem with them, helps me supervise him and help him solve any problem that he has with friends… I want to see how he behaves with his friends and that's why I ask him to bring his friends home. However, if I see something that I don't like, I'll talk to him and I ask him down questions in order to make him think, because I want him to be careful." (Community Sample, Parent 8)

7.4.2. Families from Clinical Setting

An opposite approach was illustrated by the interviews with adolescents and their parents from their clinical setting. While adolescents from the community setting stated that they have harmonious relationships with their parents, adolescents from the clinical setting struggle with it, indicating an unbalanced relationship with their parents.

7.4.2.1. Broad Theme 1: Adolescent Interpersonal Problems

Codes related to adolescents' internal experiences were revealed by the analysis of their interviews. Internal experiences were negative view of self, emotional dysregulation and worry (Table 7.5). These feelings were often reactions to other experiences or stressors related to their relationships with their family and peers, but were identified as problems in their own right.

*Table 7.5: Summary of broad theme 1 "**Adolescent Interpersonal Problems**" for families from clinical setting*

Adolescents' point of view	Themes	Parents' point of view
	Negative view of self	
Low self-esteem		
Low self-worth		
Low self-efficacy		
	Emotional dysregulation	
Management problems with their emotions		Adolescents' inability to manage their anger
	Worry	
Feelings of unease or unrest		

Negative view of self involves perceptions of low self-esteem, low self-efficacy and self-worth. A few of the adolescents mentioned that they experience stressors from academic performance, a feeling that was internalized as failure for academic performance:

"Sometimes I am really stressed with my school. I had a big problem in high school, I failed almost all my exams and so I decided to change school and to go to the technical high school where things are quite a bit easier. But again I am not doing well. I had a few B's but in my last assignments I got C's. I may sometimes pay less attention but I believe I'm trying. Maybe I'm not good enough to finish school." (Clinical Sample, Boy 15 years old)

In addition, ***emotional dysregulation*** occurred in few of the adolescents from the clinical setting when the stressors become a problem. For example, they showed that they could not manage their emotions, such as anger, when they felt that their parents could not understand them. This was also identified by parents. One parent discussed her son's inability to manage his anger in response to a long history of social victimization:

"There is a big problem in his school. In the past, some children were bullying in my son. Their behaviour made him aggressive and now the little things make him mad. I might say anything to him and it just starts him off and he is ready to fight. Especially when I am talking to him about this friends and his social life… I know that he has the same problem at school as well. Like, if somebody tries to talk to him or even brushes against him, he will start a fight." (Community Sample, Parent 5)

Furthermore, ***worry*** was another feeling that addressed by some of the adolescents in the clinical setting. Feelings of unease or unrest caused by a specific stressor were present when they struggled about a decision. These episodes involved situations where they felt concerned about friends and family members. One boy, who experienced parental conflicts stated:

"Sometimes I feel really worried about my mother. I saw my father hitting her few times and telling her that he will leave. This made me feel sick. I am thinking of talking to my mother and telling her that it may be good to get rid of him but I am also scared that he may hit me too if I take a stand. If something happens to my mother I will go crazy." (Community Sample, Boy 13 years old)

7.4.2.2. Broad Theme 2: Unbalanced Adolescent – Parent Relationship

The second broad theme is "the unbalanced adolescent-parent relationship", which is related to the distance occurring within adolescent-parent relationships as well as their miscommunication and also their responsiveness. This theme includes four sub-themes: (a) responsiveness vs. rejection, (b) lack of trust, (c) inability of adolescents to solve their problems and (d) conflicts (Table 7.6).

*Table 7.6: Summary of broad theme 2 "**Unbalanced Adolescent-Parent Relationship**" for families from a clinical setting*

Adolescents' point of view	Themes	Parents' point of view
	Responsiveness vs. Rejection	
Positive:		Supportive behaviour
Close and supportive relationships with mothers		Open to discussion
Sharing emotions		Feeling of overwhelmed by adolescents' behaviour
Involving parents in their decision-making		
Negative:		
Rejection		
No understanding		
Make their own decisions		
	Lack of trust	
Misunderstanding		Adolescents are lying to them
Negative criticism from parents		Adolescents keep secrets
	Inability of adolescents to solve their problems	
Problems related to family, friends, school and emotions		Adolescents select which problems to share
Independency		Adolescents do not accept parents' opinions
Asking for parental health only for extreme problems		
Parental negativity towards their problems		
	Conflicts	
Miscommunication / misunderstanding		Adolescents struggle to accept authority
Feeling pressured by parents		Adolescents' feeling of overprotection
Arguments about friends and school performance		Arguments about family rules and values
Difficulties coming to terms with parental divorce		Difficulties accepting parental divorce

7.4.2.2.1. Theme 2a: Responsiveness vs. Rejection

Mixed results were indicated in adolescents from the clinical setting and their parent's interviews with regard to the way they respond to each other's feelings, emotions and needs.

On the one hand, most of the adolescents (6 out of 10) described their parents as supportive, where there is a close relationship between them. They perceive understanding and affection. They mostly discuss their problems with their parents and they feel confident to express themselves. However, half of the clinically referred adolescents who expressed positive emotional support towards their parents come from divorced families, all living with their mothers. Thus, they expressed closeness regarding the mother-adolescent relationship. At the same time, when asked to describe the closeness of their relationships with their father, all of them said that they had no interaction with their father after the divorce. In some cases, feelings of anger were expressed when talking about their fathers but, at the same time, sadness was also expressed over not having a relationship with both their parents:

"I have the perfect relationship with my mother. It is really good. I trust her, I love her and she loves me too. I respect her and she respects me. Whatever I want to say, whatever I want to discuss with her, she listens to me… I don't want to talk about my father. I have no relationship with him. I am really angry with him and I don't understand why he did this to us. The only thing he offers me is money because he is sending me money every month… Sometimes I feel jealous when my friends are talking about things that do with their father. It is sad not having a father." (Clinical Sample, Boy 12 years old)

Adolescents who perceive emotional support from their parents indicated directness in the discussions and decision-making in their homes. They described situations where parents ask for and take account of their opinions and decisions are taken conversely. They also involve their parents in decisions that they have to take in relation to their friends or school:

"They always ask for my opinion. They want me to participate in decisions that we have to take all together… and I express my opinion even if it is different from theirs… and then we decide all together. We discuss everything, things about me, things about the house." (Clinical Sample, Girl 15 years old)

On the other hand, there were a few adolescents (4 out of 10) who stated that they did not feel close towards their parents or their mothers (in cases where their parents are divorced). They stated in their interviews that they feel rejected, as their parents do not give them the attention that they want, and they also mentioned that there is no understanding between them and their parents. As a result, they are not open to discussing personal issues with their parents, and they prefer to make their own decision "no matter what their parents say". In addition, some of them also mentioned that their parents are not able to communicate with their feelings:

"I want a bit more attention from my parents, especially from my mother. My father is at work most of the time so I don't really see him and I have no expectations of him. But from my mother I have. It is not that we don't talk, we do, but she doesn't understand me. Maybe it's because we have different characters. I don't know. So most of the time I prefer to avoid any discussion." (Clinical Sample, Girl 16 years old)

From the parents' point of view, there is support between them and their adolescent children. They mentioned in their interviews that they show affection and support to their offspring, they are open to discuss anything with them and they respond to their needs. Conversely, they also stated that even though they try hard to bring their adolescents close, they know that the latter feel rejected:

"I show him affection. I want him to feel close and safe with me. I give him everything because I don't want him to miss out on anything. However, he is always asking for more attention. Sometimes he tells me that I don't love him because I pay more attention to his younger sister. Some other times, he says that we don't want him as our son because I try to place certain limits within the home and I say 'no' to him." (Clinical Sample, Parent 4)

Parents also indicated that they feel too overwhelmed to control their adolescents' behaviour and this impacts on their relationship. The adolescent's behaviour was mentioned as a stress factor by a few parents who stated that they struggle to understand such behaviour and sometimes they have difficulties in approaching and communicating with their children:

"I don't know how to control or approach her. She becomes so negative towards me. When she feels that I am not giving her what she's asking for, she becomes so reactive that I don't know what to do. Sometimes I try to explain to her why I say 'no' but she doesn't want to understand." (Clinical Sample, Parent 5)

7.4.2.2.2. Theme 2b: Lack of Trust

Even though clinically referred adolescents expressed mixed feelings in relation to the closeness of their relationship with their parents and the support that they perceive, the lack of trust was mentioned in almost all interviews and it emerged as an important indicator of the quality in adolescent-parent relationship. As the adolescents described it, they do not trust their parents for several reasons, including misunderstanding, criticism by their parents and the parental reaction in situations where they may do something wrong or break a rule:

"I don't really trust my mother. At my age she doesn't understand me. Whatever I discuss with her, she always finds something bad to say or she will try to show me that I'm wrong. And I know that she doesn't trust me but it's OK. I don't care." (Clinical Sample, Boy 13 years old)

As one girl stated, she may sometimes discuss personal issues with her parents but *"this doesn't mean that I trust them, because I either say half the truth or I tell them only what I want them to know".*

A strong characteristic that was revealed in the parents' interviews in relation to the issue of lack of trust was the fact that adolescents lie. About half of the parents said that their offspring either lie or keep secrets. However, a difference between parents' and adolescents' perceptions occurs with regard to trust, as the parents showed a strong belief that their adolescent children trust them:

"We trust each other. I know my child trusts me a lot as he comes and asks me about different things that are happening to him. I trust him but sometimes I don't. I know, because I have tested him, that he sometimes lies to me and this doesn't help me

to trust him. Of course, I don't show him this but a few times I've told him that I know that he's lying to me… and I am also afraid because I know he can't distinguish right from wrong and he sometimes does bad things which he doesn't even tell me about." (Clinical Sample, Parent 10)

7.4.2.2.3. Theme 2c: Inability of Adolescents to Solve their Problems

Adolescents from the clinical setting described situations where they faced serious problems in relation to their friends, school but, importantly, problems related to their inability to control their emotions and it seems that there is a degree of parental negativity towards their problems. Most of the time, they struggle to solve their problems, as they do not know how to approach them. At the same time, they prefer to be alone and try to solve their problems on their own rather than ask for help. This is because they feel that their parents cannot understand them and when they try to solve a problem they end up fighting.

As one adolescent mentioned, *"I prefer ignore the problem and not solve it rather than ask my mother for help because she can't help me."* (Clinical Sample, Boy 15 years old)

Some parental involvement seems to occur in situations where adolescents have to solve a problem. This occurs in cases when the adolescent feels that a situation is *"out of control"*. This is not surprising as it can be argued that adolescents do not trust their parents. And because of this, even if they discuss a problem with a parent, they prefer to present it briefly, in order to avoid details, as they do not want their parents to be involved in their problems and know too much about them:

"I don't really ask my parents to help me when I have a problem. Why should I? It is my problem and I know that they won't get my point so they won't help me either… it has to be a big problem in order to discuss it with my parents. And if I do, I'll talk about it with my mother first and then with my father. But I never go into detail about it." (Clinical Sample, Boy 14 years old)

Adolescents' perceptions of problem solving are recognised by their parents as well. Parents mentioned in their interviews that adolescents select which problems they will discuss, as most of the times they prefer to keep their parents out of their lives. In addition, even when parental involvement is asked for, adolescents may not accept their parents' opinion:

"We discuss his problems but only when he wants to. He has to decide when he wants to talk to us in order to be able to talk to him. Otherwise he will not accept to discuss anything with me if I go and ask him." (Clinical Sample, Parent 4)

7.4.2.2.4 Theme 2d: Conflicts

Adolescents' relationships with their parents appeared highly conflicted. A significant reference was made by adolescents and their parents to their experiences of conflict as well as their perceptions about the reasons why conflicts occur. From the adolescents' point of view, situations involving conflict included those in which they felt pressure from their parents. As they mentioned, their parents are very demanding and this puts pressure on them that they cannot control. For example, many of the adolescents argue with their parents about their friends and their school performance. They also experienced conflicting norms when they perceived differences in

expectations between themselves and their parents. As they argued, these differences complicated their problem solving ability and challenged developing values. Additionally, as a consequence of the conflict with their parents, adolescents expressed feelings of sadness and stress:

"I fight all the time with my parents. They always want something more from me, and I don't like this. It makes me anxious and stressed... sometimes they don't let me go out and meet my friends because I didn't study or I didn't clean my room." (Clinical sample Girl 16 years old)

"I fight a lot with my father. And when that happens, we scream at each other quite aggressively. He gets really angry with me when we fight… what disappoints me in my relationship with my parents and especially with my father is that we fight and argue a lot." Clinical Sample, Boy 13 years old)

From the parents' point of view, adolescents struggle to accept their parents' authority over their lives. This creates conflict between them and their adolescents over family rules and values. For example, one mother mentioned that, as parents, they do not accept her son showing no respect to them by screaming at or cursing his parents. Another parent indicated that their conflicts are related to her school performance, as *"she is not allowed to go out and meet her friends before finishing her homework."* These situations are also associated with punishments that parents reinforce when their offspring break a rule. All parents stated that there are consequences for their adolescents if they break a rule, consequences that are not accepted by their offspring and this produces big arguments between them:

"Every time I say 'no' to her, she becomes reactive and we fight. She can't understand that she can't have everything her own way and she can't get this outfit or these shoes… she has to follow the rules in the house until she's 18 and she goes to college." (Clinical Sample, Parent 10)

In addition, as mentioned by parents, it seems that if adolescents feel that their parents are demanding or overprotective this may cause conflicts:

"I had a talk with the psychologist that my daughter is seeing and she told me that my daughter feels that I am oppressing her and not giving her enough space. She told her psychologist that I am arguing with her all the time about her friends or her going out or her school. She also told her that I force her to do things that she doesn't want to. I had no idea that she feels this way because from my perceptive I give her the freedom to do what she wants but I also want her to be OK at school and with us at home." (Clinical Sample, Parent 10)

Furthermore, conflicts are also related to changes occurring in the family structure. While many adolescents reported difficulties coming to terms with their parents' divorce, many parents reported difficulties in making their offspring accept the situation. Parental divorce brings unbalance to the family's dynamics and this affects adolescent-parent relationships. For example, there are cases where adolescents become aggressive towards the parent who they hold responsible for the divorce and, at the same time, single parents struggle to control the family environment:

"The fact that my mother separated from my father negatively affects me a lot because it make us fight at home. My younger sister became aggressive, my mother was

unable to provide us support and I feel that sometimes she is arguing with me for no reason." (Clinical Sample, Girl 15 years old)

"Since I divorced her father, we have had a lot of arguments at home. She was the one who found out that her father was having an affair. Since then, she has blamed me for it. She became aggressive, and whatever I say she reacts to. She says, for example, that she wishes her father was here because he would let her go out and I don't… I really don't know what to do to make her understand that it is not my fault. It is not easy for me either but we have to support each other and not fight." (Community Sample, Parent 2)

As a consequence of their conflicts, the adolescents stated that there was no need for parental involvement in their lives. They prefer to be alone in their rooms rather than fight with their parents:

"I like the fact that I have my own room and I can be there alone, having my own peace, without hearing my parents screaming at me. We fight so much so instead of interacting with them or telling them what's happening to me and then starting a fight since they don't understand me, I prefer being in my room or telling them that they don't need to know what's going on. Rather than fighting with them, I keep them out of my life so as not to bother myself with anything" (Clinical Sample, Boy 13 years old)

7.4.2.3. Broad Theme 3: Adolescent' Problematic Social Life

Another broad theme that emerged from the coding and the analysis of the interviews with adolescents and their parents from the clinical setting is that adolescents experience difficulty engaging with people and developing friendships. Consequently,

the third broad theme is "Adolescents' problematic social life". This broad theme is divided into two sub-themes: antisocial behaviour (focusing on parental and adolescent perceptions of friendships in adolescents' social life) and authoritarian control over adolescents' social life (focusing on parental involvement in adolescents' social life, as perceived by both adolescents and their parents) (Table 7.7).

*Table 7.7: Summary of broad theme 3 "**Adolescent' Problematic Social Life**" for families from the clinical setting*

Adolescents' point of view	Sub-themes	Parents' point of view
	Antisocial behaviour	
Difficulty engaging with people Difficulty developing friendships Feelings of social isolation No trust of people Engaging in fights as a proof of friendship		Signs of antisocial behaviour Aggressive actions by adolescents
	Authoritarian control over adolescent' social life	
No need for parental involvement Feeling of criticism Feeling of control		Extreme control of adolescents' friendships Monitoring of adolescents' friendships Separation from peers if necessary Safety Worry

7.4.2.3.1. Theme 3a: Antisocial Behaviour

More than half of the adolescents indicated that they have no friends or they have few close friends (a maximum of two), as they struggle to make close friends. This behaviour is a result of bullying, a closed nature, being teased, a lack of acceptance, a lack of social skills or an inability to socialize. Consequently, a feeling of social isolation is reported by adolescents from the clinical setting:

"I don't have many friends, only one and he's not all that close to me either. When I'm at school, I prefer to sit alone and think rather than go and interact with others. Most of them belch or they make fun of each other and I don't like this." (Clinical Sample, Boy 14 years old).

No trust of people was another significant indicator of the clinically referred adolescents' perception of friendships:

"I don't trust my friends. I had a friend who betrayed me. I was so disappointed. She made me ill. So now I don't trust anybody. OK, I'll sometimes go out with a few people but that's it… I have no close friends." (Clinical Sample, Girl 16 years old)

In addition, a few of the adolescents who mentioned that they experience peer relationships, described situations in which peer pressure occurred. Peer pressure involved the perception that engaging in certain behaviour such as fighting was necessary to gain peer acceptance. Such behaviour may conflict with personal or family values but they were based on perceived peer norms: this is illustrated in the following quote from one of the boys from the clinical setting who was pressured by his friends to damage school property:

"I know that my friends sometimes don't behave well. They asked me one time to go and write something really bad on my classroom wall… I didn't want to, I knew it was bad… but it was hard for me to say no to them. I didn't want them to think that I was scared and then to start laughing at me." (Clinical Sample, Boy 14 years old)

Signs of antisocial behaviour were also identified in the mothers' interviews, referring to adolescents from divorced families. They described situations where their offspring were involved in aggressive action towards their peers. In one case, a mother

also mentioned that her son was involved in aggressive action against property such as vandalism:

"He behaves aggressively when he is with his friends. A mother of his friend called me one time and she told me that our sons were involved in vandalizing school property. They were causing damage and writing on the walls of their school. In the beginning, when I told him that I'd found out about it, he started screaming and lying, saying that he had not been a part of it. When I asked with how he would feel if somebody came and destroyed our house, he realized what he had done and he apologized… I know that he had problems building friendships and in the past some of his friends were bullying him or 'making him feel small' as he told me. And I believe he joined these people who make up the 'cool' group at school in order to prove to himself that he could be strong and popular, and not the person who everybody making fun of." (Clinical Sample, Parent 7)

7.4.2.3.2. Theme 3b: Authoritarian Control over Adolescent' Social Life

Extreme controlling and monitoring of adolescents' friendships were factors that characterized parental involvement in their offspring's social life. In the situation where a mother felt that her son was involved in aggressive behaviour towards others of his age, separation from his peer group was her solution how to control him. 'Crossing the line' was another term used by parents. Thus, protecting and correcting their adolescent children's image were among the main goals of their parents. In addition, safety was brought up by a significant number of parents and it seems to be a concern that they face. Worries related to their children's behaviour within their peer relationships also occurred. Regarding their attempts to protect their offspring, the adolescents' perception

was that they were placing restrictions on their children, which affected their relationship and created conflicts between them:

"I try to keep him away from his friends when I don't like them and I see that they have a bad influence on him. Of course he doesn't accept it and he reacts against it but I want to show him that we have to keep some people away from our lives. I have to protect him. That's my role. Since I wanted him to stop keeping company with one or two children, really bad boys, I told him that he was not allowed to bring his friends home or to go out with people that I don't know. And if he sometimes goes out, I want to know where he is and with whom and I will be the one who will take him there and pick him up." (Clinical Sample, Parent 9)

Separation from the peer group was also cited by two other parents who felt that their daughters had picked up bad habits, such as smoking, as a result of their new friendship:

"She has such bad friends who influence her a lot in a bad way. So she gives me no alternative but not allow her to see them anymore. A few months ago, she met this girl and at the same time I found out that she had started smoking. I knew that this girl smoked so I am sure that she persuaded my daughter to start. I asked my daughter to stop seeing her but she didn't. So I called this girl and told her that I didn't want her to see my daughter again because I knew that she was smoking and I would tell her parents. In this way, I believe I controlled the situation even though my daughter she is angry with me." (Clinical Sample, Parent 10)

Furthermore, feelings of worry and concern were also stated in the parents' interviews in situations where parents realized that social loneliness characterized their

children. They identified the problem of social isolation and most of them tried to find ways of helping their children such as asking them to bring friends home, trying to organize parties for them and involving them in afternoon activities where they could meet new people:

"We have problems with her friends. She prefers being alone rather than interacting with other people. I am pushing her to make friends but she always says that she doesn't want to, that no-one can understand her, or she doesn't have the same interests as anybody in her school. I decided to involve her in dance classes, which is something she likes, and let's hope she will meet some new children. I needed to do something in order to help her." (Clinical Sample, Parent 7)

From the adolescents' point of view, there is a tendency towards keeping their parents away from their social lives. Feelings of criticism and control were perceived by adolescents in relation to their parents' involvement in their social lives. These feelings put pressure on, and create anger in, adolescents. They indicated that they prefer to avoid discussing peer relationships with their parents. Even if they face problems in relation to peer relationships, it is their *"own problem"* as one adolescent said. As a result, they don't want their parents to being involved in their social lives:

"I have my own life… there is no need for my mother to know my friends, because if she meets them, she will have something to say about each one. And I can't stand this. So I don't bring my friends home" (Clinical Sample, Girl 16 years old)

"They try to control my friendships. They ask me to stop seeing somebody if they don't like him and I hate this." (Clinical Sample, Girl 17 years old)

7.5. Discussion

This Chapter's aim was to explore the relationship between adolescents and their parents by investigating both their perceptions with regard to their relationship as well as parental involvement in adolescents' lives, both within and outside their family environment. The results of this study reveal that there is a different perspective between families from clinical and community settings, with the adolescent-parent relationship from the community setting being close and balanced, while the relationship between adolescents and their parents from the clinical setting is unbalanced and distant. On a more specific level, the interviews provided important information about contextual issues and the interconnections among constructive or problematic areas occurring across this relationship. They confirm the importance of attachment and communication between adolescents and their parents, while they highlight even further that mismatches and dysfunction between adolescents and their parents can have implications in adolescent mental health.

Adolescent-parent relationship, as described by adolescents from community setting, is characterized by understanding and communication, which leads to the development of trust. In addition, they count on each other's opinions and they experience and express each other's emotions and feelings. Parental affective responsiveness to adolescents' emotions, feelings and needs enables parents to construct a secure emotional environment for their adolescents, which is a resilience factor for maltreating behaviour (Epstein, Bishop, Ryan, Miller, & Keitner, 2003). The secure base between adolescents and their parents allows adolescents to discover their world independently, yet retreat back to primary caregiving relationships when distressed or in

need of help (Allen & Land, 1999). Clearly, adolescents from the community setting in the study sought a secure base from their parents.

In contrast, a lack of trust, some support and in some cases rejection characterized the problematic relationship between adolescents and their parents from the clinical setting. Interpersonal problems, including a negative view of self, emotional dysregulation and feelings of worry identified in adolescents from the clinical setting, seem to impact the way both adolescents and their parents perceive their relationship. For adolescents from the clinical setting, the secure base was the source of distress, which revealed an insecure attachment. The response of the insecure base contributes negatively to internal representations in the child (Bettmann, Olson-Morrison, Jasperson, 2011). This can explain the feelings of low self-esteem and low self-worth observed in these adolescents. This finding is in line with Yarcheski et al. (2002) who found that poor adolescent-parent relationships characterized by insecure attachment were positively related to low self-esteem in adolescents. As a result of the negative internal representation of the adolescent, for example, even though the participants from the clinical setting appeared to observe some kind of secure base provided by their parents or to describe some feelings of support, they also expressed a lack of trust in their parents.

Adding to this, trust, in the relationship between adolescents and their parents, emerged as a central component and was revealed to be a critical quality needed in the adolescent-parent relationship in both the community and clinical samples. In essence, as illustrated by the pervasiveness of the participants' descriptions of trust in the community setting, both adolescents and their parents trust each other. The feeling of trust helps them value their relationship and count to each other. A securely attached

relationship between adolescents and their parents could also help minimize the lack of accessibility observed in the community sample (Bowlby, 1969). It can be seen that even though the participants from the community sample noted a lack of accessibility to their parents, characteristics such as communication and understanding helped them understand the reasons behind the lack of accessibility, and approach this problem in a positive way. From the other side, parents showed an effective way of controlling and overlapping their appearances as they try to spend quality time with their children when they are free. Quantity vs. quality time was an important indication that parents from the community sample described in their interviews. They stated that when they spend time with their children, they are fully focused, intentional, and engaged with their offspring. Their attention is directed to the adolescents.

However, the opposite occurs in adolescent-parent relationships from the clinical setting. As a result of the lack of trust between them, adolescents seem to undervalue their relationships with their parents. This finding supports previous research which showed that, although clinically referred adolescents identified the importance of trusting adults in their lives, they also reported a lack of trust between them and their parents (Bettmann, et al., 2011).

Participants in both the community and clinical settings indicated differences between mother-adolescent and father-adolescent relationships. Adolescents seem to experience a closer relationship with their mothers compared to their fathers. In the community setting, this was mainly due to the fathers' workload, whereas in the clinical setting it was due to parental divorce. Previous literature examining differences between mothers' and fathers' relationships with their adolescents illustrated that their children displayed a more positive attitude towards their mothers than to their fathers due to

differences in the frequency and content of the interactions (Collins & Russell, 1991). Although fathers were shown to be typically less involved with adolescents' lives than mothers in this study, in both settings, both relationships appear to be important in adolescents' lives.

Considering the feelings of support and acceptance from parents and the quality of parent and adolescent interaction occurred in the community sample, these characteristics can be interpreted as protecting factors against the development of mental health problems during adolescence. Kliewer and colleagues (2004) found that quality in teens' and parents' relationships was a key protective factor against stressors that impact on several mental health problems. In support, Parvizy and Ahmadi (2009) argued that adolescents who have warm and caring parents are at a lower risk of becoming addicted to smoking and drugs. In contrast, problematic relationships with parents were found to lead to aggressive and antisocial behaviour in adolescence (Gallarin & Alonso-Arbiol, 2012) as well as anxiety (Gungor & Bornstein, 2010). The present study supports these findings as the characteristics of antisocial behaviour and aggressiveness were observed in clinically referred adolescents who are not only missing support but their families seem to be a source of stress.

However, results from the present study showed that there are cases where adolescents' behavioural problems influence parental support and caring. Specifically, parents of adolescents from clinical sample reported a difficulty or reluctance to engage in disciplinary actions because of a fear of the child's behavioral response. This finding supports previous research, which argued that Externalizing problems predicted lower parental support, involvement and poor communication (Burke, Pardini, & Loeber, 2008). This association might be due to the fact that parents may withdraw from

engagement in disciplinary practices with children who experience externalizing symptoms.

Moreover, the role of family communication was also found to differentiate between clinical and non-clinical families, as adolescents from the clinical setting mentioned several times that there was miscommunication between them and their parents, something that was not brought up by adolescents from the community setting. In addition, participation in family rituals and routines appeared frequently in the community sample but did not come up in the clinical sample. Family rituals and routines could be seen as an effective way of communication as they are an opportunity to build strong and positive connections, inclusive of good communication, positive interaction, caring and support among family members (Kiser, Bennett, Heston & Paavola, 2005). As found by Kiser et al. (2005), family rituals and routines work against the development of psychopathological problems. Therefore, it could be argued that a lack of communication between adolescents from the clinical setting and their parents may be due to a lack of organising and participating in family rituals.

Another difference to emerge between the participants from community and clinical settings is parental involvement in adolescents' lives. As found by Chao (2001), a close relationship between adolescents and their parents could explain a beneficial effect of parental involvement in adolescents' lives. In support to this, the adolescent-parent relationship in the community setting is characterised by the affective involvement of parents whereas the adolescent-parent relationship in the clinical sample provided no evidence of parental involvement. Consequently, interviews with both adolescents and their parents from this sample group indicated that the parents play an active role in their adolescents' lives in areas such as problem solving, decision-making

and school performance. Affective parental involvement seems to help both adolescents and their parents in the community sample to move forward in difficult situations and value their relationship. For example, parental involvement in adolescents' school performance was shown to gain and support connectedness, even though some adolescents described demanding parental behaviour as evidence of their parents putting pressure on their school achievements. Having said that, this parental behaviour seems to be beneficial as it works positively on adolescents and helps them achieve higher grades. Parental involvement with adolescents, especially being involved in their homework, sets up career aspirations in adolescents. Adolescents' aspirations also play a role in their wellbeing (Ashby, & Schoon, 2002).

In addition to this, parental involvement in adolescents' problem solving could be beneficial to the latter's mental health, as it provides support when adolescents struggle with a situation. Adolescents have more limited control over their environments than adults, thus their ability to make the "right" choices and solve their problems may be restricted (Manassis, 2012). If parents, instead, are aware of these problems, they can help their adolescents follow complex directions, and thus help them build their confidence and self-esteem (Manassis, 2012).

A different picture emerged from the participants from the clinical setting where no parental involvement was found to occur in the adolescents' lives. This was due to a lack of trust as well as a lack of understanding. For example, the adolescents from the clinical setting prefer to solve their problems on their own or not try to solve their problems because they do not want their parents to be involved in their lives. This reaction is a consequence, firstly, of lack of trust, as they cannot trust their problems to their parents, and secondly, of their parents' strict reactions to their problems. This

supports previous research which argued that depressed children with poor self-esteem might feel that it makes no difference what they do in a difficult situation as they may believe that their effort will not affect the outcome of a situation and, thus, they prefer to not bother trying (Manassis, 2012). Manassis (2012) illustrated that adolescents growing up in authoritarian families rarely ask for parental help and involvement in their problem solving and decision-making. This is because they may become anxious, afraid that there will be strict consequences if they do not provide the "right" answer (Manassis, 2012).

Adolescents' problem solving is also related to their feeling of autonomy and independence. In this study, taking their own decisions and solving their problems on their own were perceptions mentioned by all the adolescents. However, parental styles in this study and especially by the parents of adolescents from the clinical setting were characterised by control where some boundaries were imposed on the adolescents' autonomy. The concept of autonomy, defined as a state of being independent or self-governing, was found to be a fundamental element in the developmental stage of adolescence (Spear & Kulbok, 2004). It is the process of defining and determining one's character by taking control of decision-making regarding health, family, peers and the future (Farrell, et al., 2007). Adolescence is a time when autonomy is negotiated (Neel, Jay, & Litt, 1985). There is a challenge to independence for both adolescents and their parents as it involves a balance between the desire to be independent and being connected with the family. A few studies, which have examined the relationship between autonomy and adolescent mental health, have argued that if adolescents' development of autonomy impacts on their relationship with their parents, a negative connection between autonomy and emotional and behavioural problems may occur, as

autonomy may be isolated from how adolescents practice their negative behaviour (Spear & Kulbok, 2004).

In a study by Chirkov and Ryan (2001) exploring Russian and American cultures, autonomy supported by parents had a positive impact on adolescents' well-being. In support of this, adolescents who were allowed to express autonomy were found to be less likely to engage in risky behaviour (Williams, Cox, Kouides, & Deci, 1999). This can be explained by the self-determination model of health-related behaviour. Williams, Cox, Kouides, and Deci (1999) tested this model in adolescents whose parents fostered autonomy and found that the adolescents were more likely to avoid risky behaviour such as smoking and drug addiction. However, autonomy was found to have a negative impact on adolescent behaviour when it is not balanced with the human need to maintain a sense of attachment with family (Crittenden, 1990).

In support, results from a study by Allen, Hauser, Elckholt, Bell and O'Connor (1994) revealed that difficulties experienced by adolescents in establishing autonomy and relatedness with parents were linked to both depressed affect and externalizing behaviour. Specifically, externalizing behaviour was strongly associated with difficulties in maintaining relatedness with parents, whereas depressed affect was mostly associated with establishing autonomy. Many participants in this study described rebelling against the boundaries set by their parents. Those describing negative relationships with their parents also described the latter as controlling and strict. Such descriptions reveal the push for autonomy, which is critically important during the developmental stage of adolescence. Therefore, parental control and neglect of adolescents may provide some explanation of adolescent mental health problems in the clinical sample.

Furthermore, conflict was found to be an important theme to emerge from the participants in the clinical sample. Both adolescents and their parents stated that their relationship appeared to be highly conflicted. From adolescents' point of view, adolescents perceived conflict as a result of pressure and demanding behaviour from parents. In addition conflict in relation to divorce was frequently mentioned. Adolescents reported difficulties in coming to terms with their parents' divorce, while many parents reported difficulties in making their offspring accept the situation. As stated by Maenle and Herringshaw (2007), conflict is a result of a lack of communication. There is evidence from previous studies, which show that conflict acts as a risk factor for developing depressive symptoms in adolescents (Taylor, Repetti & Seeman, 1997). High levels of conflict that cause low levels of behavioural and emotional involvement were some of the characteristics of parent-child relationships that were found to be associated with depression in children (Taylor, Repetti & Seeman, 1997).

As stated in the literature review (Chapter 2), Emery (1989) explored how conflict contributes negatively to children's' psychopathology, indicating that in conflict parents practice inconsistent disciplinary actions, disrupt emotional bonding with their children and serve as stressors in their children's environment. As a result, threatening the child's sense of security leads to withdrawal and anxiety. In support of this, Farrell and colleagues (2007) argued that conflict is a major problem occurring within the adolescent-parent relationship, as it can lead to unsupportiveness, low satisfaction and emotional distress, feelings that are found to be significantly related to emotional and behavioural problems (Farrell, et al., 2007). The arguments of both Emery (1989) and Farrell et al. (2007) could explain the mechanisms behind conflict within this study's clinical sample. As adolescents from the clinical setting argued in

their interviews, conflict was not only related to the pressure or difficulties of coping with parental separation but was also linked to their interpersonal problems such as emotional distress or low levels of satisfaction within their family environment.

However, parents perceived conflict as a result of adolescent misbehaviour and lack of controlling adolescents' emotional and behavioural problems. This finding showed that adolescents' mental health problems influence adolescent – parent conflict. Borrowing ideas from the sociological literature on family stress and role strain (e.g., Margolin, 1981), one can argue that poor adolescent mental health is stressful for parents, which would limit an adolescent's sensitivity and response to parents' demands and desires, therefore contributing to increased parent-adolescent conflict (Shek, 1998).

Having stated the above problematic situations in adolescent-parent relationships in the clinical sample and mentioning non-engagement in their lives, an important factor that was found to impact on their relationship is parental separation. Half of the adolescents from the clinical sample were from divorced families, thus their outcomes has to be considered in relation to their experience of parental separation. While the aim of the larger study, from which this report was written, was not to study the effects of divorce on children *per se*, the findings presented here suggest that the children's responses may have reflected specific concerns related to their family circumstances, i.e. parental separation and family structure. Growing up in a family that lacks either a biological mother or father correlates with a number of poor outcomes for young people (Zwaanswijk, Van Der Ende, Verhaak, Bensing & Verhulst, 2003). Early studies of separated and divorced families clearly established that marital dissolution is often accompanied by increased levels of stress and strain that continue long after divorce and have negative consequences for the lives of both the separated or divorced

parent and their children (Hetherington, Cox, & Cox, 1979a, 1979b; Weiss, 1975). This association has been explained, in some studies, by socioeconomic disadvantage (Spencer, 2005).

Zimmerman (2005) argued that parental factors, such as absence of a father or living only with a mother, are strong predictors of children's mental health as they cause family conflict and family disorganisation (Aseltine, 1996) as well as low parental monitoring and supervision (Van Voorhis, Francis, Richard, & Connie, 1988). Previous research has indicated that divorced families are characterised by higher levels of negativity and lower levels of support and parental involvement in their children's lives (McLanahan & Sandefur, 1994), while changes in daily life become unstructured and chaotic for the family members (Astone & McLanahan, 1991). This supports the present study's finding that illustrates that conflict and a lack of a close relationship with the mother are examples of the outcome of the problems that parental separation produces the lives of adolescents in the clinical sample. Adolescents' perspectives on coping and the need for support are negatively influenced by parental separation (Halpenny, Greene, & Hogan, 2008), as there is no model of support (Hawthorne, Jessop, Pryor & Richard, 2003)

Several studies have explored the association between the experience of parental separation and mental health problems. In a study by Amato & Keith (1991), the findings illustrated that children who experienced divorce were twice as likely to develop or experience mental health problems compared to children who were living in two-parent families. This is due to the fact that adolescents are exposed to stressors produced by the loss of parental control and decreased child-parent attachment Nye (1958). Moreover, according to a study by Roustis, Chaix and Chauvin (2007), children

from single parent families are more than twice as likely as children from two-parent families to have Internalizing problems and are almost three times more likely to have Externalizing problems.

In order to better understand adolescent-parent relationships, observations where made of adolescents lives outside the family. Results revealed that adolescents' relationships outside the family impact adolescent-parent relationships and vice-versa. On the one hand, peer relationships were considered to play a crucial role in the lives of adolescents from the community sample. As these adolescents stated, affective parental involvement and responsiveness as well as a secure attachment with their parents help them build a trusted and valued relationship with their peers. Previous studies have recognized the role of social group and peer relationships in the establishment & maintenance of social perceptions and social values, including concept about self and trait of others (Fletcher, Steinberg, Darling, & Dornbusch, 1995). The increased support and freedom from parental supervision that occurs may result in adolescents having more opportunities to interact with peers in the community (Coleman & Hoffer, 1987). These interactions found to help adolescents to develop concepts about self and traits of others (Fletcher, et al., 2012). In support, having large and good peer relationships within social networks is associated with better school performance (Cochran & Bo, 1989) and more positive social behaviour among adolescent boys (Fletcher, et al., 1995).

On the other hand, unstable and problematic friendships were described by both adolescents and their parents in the clinical sample. Lack of trust and understanding were the main characteristics of the peer relationships of this sample group. This was linked to the lack of trust in parent relationships. This finding provides an excellent

illustration of insecure attachment representations and internal representations of low relational expectations. This can be explained by adolescents' internal working model. As explained in the literature review of this Thesis (Chapter 3), humans formulate close emotional bonds in the interest of survival. These bonds facilitate the development of mental representations of the self and others that help them predict and understand their environment, engage in survival promoting behaviour and establish a psychological sense of security (Bolwby, 1969). During adolescence, attachment relationships begin to form between adolescents and peers and not just with parents (Ma & Huebner, 2008). Although adolescents seek autonomy from their parents and turn to friends for their attachment needs, they continue to rely on their parents for a secure base (Allen & Land, 1999).

Previous research has established that adolescents with secure attachments with their parents demonstrate higher levels of emotional functioning in peer relationships (Laible, 2007). In line with this study's observation on the impact of adolescent-parent relationships on adolescents' peer relationships, securely attached adolescents display trust and express importance and satisfaction in peer relationships, while insecurely attached adolescents display a lack of trust in their parents will also display a lack of trust and dissatisfaction with peer relationships. (Allen, Hauser, O'Connor, Bell, & Eickholt, 1996; Kuperminc, Allen, & Arthur, 1996).

Parental overprotection and control towards peer relationships lead to conflict and the development of emotions like unsupportiveness and unresponsiveness among adolescents from clinical setting. The quality of peer relationships have a direct impact on the adolescents' ability to self-disclose while parents become those who could be restricting this search for freedom and experimentation (Proctor, 2006). Forehand and

Wierson (1993) contend that adolescents turn to their peers to obtain reinforcement, modelling and support concerning values and belief. Montemayor (1983) reported that teens and their parents argued on average twice a week about parental overprotection and control in adolescents' social lives. Previous research has examined parental control and adolescent mental health and indicated a negative association between these two factors (St George & Wilson, 2012). Consequently, parental overprotection and control experienced by adolescents in the clinical sample may be an indicator of their mental health problems. Clausen (1996) found that parental styles with low levels of warmth, care and protection such as authoritarian and uninvolved were associated with high levels of alcohol and tobacco use.

In addition, social isolation also seems to have a strong impact in adolescents' mental health problems in the clinical sample as causing the development of low self-worth. In concert with other findings, the data suggest that peer isolation and victimization may lead to feelings of internal distress. For example, Vernberg, Abwender, Ewell and Beery (1992) demonstrated that peer experiences predicted increases in early adolescents' social anxiety. Peer rejection and negative peer experiences have long been thought to play a causal role in the development of social anxiety among adolescents (La Greca & Harrison, 2005).

Additionally, as also stated by participants in the clinical sample, peer pressure involved the perception of engaging in antisocial behaviour. These findings add to the evidence regarding the negative association between peer relationships and adolescent mental health problems. For example, in an old study by Berndt (1979), adolescents were asked to indicate how they would respond to hypothetical situations in which close friends encouraged them to join in various antisocial behaviours. Results of Berndt

(1979) study showed that adolescents were willing to follow peers in antisocial behaviours. This occurs because, during adolescents, peers were seen as encouraging misconduct less than other types of behaviour (Brown, Lohr, & McClenahan, 1986). In support, Capaldi et al. (2001) found that antisocial adolescents have more contentious and less satisfying peer relationships that, in turn, limit the remedial social skills that adolescents can experience in the peer context (Patterson, Reid, & Dishion, 1992). La Greca and Harrisson (2005) examined the impact of peer relationships on adolescents' social anxiety and depression, and found that the negative qualities of best friendships and romantic relationships predicted social anxiety and depressive symptoms.

7.5.1. Limitations

The interview approach taken in this study, in association with the engagement of different recipients from both community and clinical settings, can be marked as a big advantage, which allowed an in-depth exploration of adolescent-parent relationships and has added to our understanding of the family's role in adolescent mental health problems. However, these findings should be acknowledged in the context of this study's limitations. First, investigations in this field are complicated by the appreciation of the developmental strategies and the on-going nature of transition, thus the findings in this Chapter cover just one moment in time in the lives of these young people. Second, although the sample was randomly selected from the participants in the previous studies, the representativeness of the sample for other areas of Cyprus remains unknown. In addition, parental participation in this study was mostly by mothers. This is important in the context given to the adolescent-parent relationship.

In the qualitative portion of the study, it is not clear whether the open-ended questions were understood in the same way by all the respondents, and this assumption may impact on the outcomes of the study. However, in an effort to limit this problem, the research through the interviews tried to provide explanations to questions when the participants showed misunderstanding. Another limitation of qualitative research is the fact that the influence of the researcher's own perceptions may impact on the interpretation of the research questions. However, the large sample may help in avoiding this limitation as more opinions and findings are addressed by the participants. Considering these limitations, it is worth to mention that the positive nature of the adolescent – parent relationship in community families, which has been discussed in both results and discussion section, was an accurate reflection of the data rather than researcher's bias.

7.5.2. Further Recommendations

Several of the findings from this Chapter are worthy of further exploration. As the findings could be interpreted only for the specific time when the interviews took place, a follow-up study several months later could give power to the findings and could provide more comprehensive picture of the ongoing relationship between adolescents and their parents. In addition, further research involving interviews from fathers would contribute to a better understanding of family dynamics.

7.6.Conclusion

To conclude, the findings from this study demonstrate significant differences between adolescents from community and clinical settings, indicating problems within adolescent-parent relationships, such as a lack of trust, communication and affective parental involvement in the adolescent's life. These differences have an impact on adolescents' mental health problems as it can be argued that being able to build up a secure base, self-esteem and the skills needed to face any problems occurring in their lives could help prevent the development of mental health problems in this age group. While being vulnerable to emotional instability due to adolescents' relationship with their parents, internal problems occurred in clinically referred adolescents that may be the reason for them being diagnosed with mental health problems. In addition, this study indicates the multiple aspects of risk factors in the development of mental health problems in adolescents by including the impact of peer relationships, with adolescents from a community setting experiencing good and valued friendships while adolescents from a clinical setting struggle to develop friendships and trust people.

CHAPTER 8: GENERAL DISCUSSION

8.1. Overview

This Chapter begins with a summary of the results, which are then interpreted and related to the existing literature. Next, the general limitations of the research are discussed. This Chapter then examines the clinical relevance of the findings. Finally, suggestions for future research are proposed.

7.2. Summary of Results

The current Thesis had two overarching objectives. First: to examine the frequency of mental health problems in Cypriot adolescents. Second: to investigate the impact of the family – and specifically family factors related to attachment, functioning and communication – on the risk of mental health problems during adolescence. A mixed-method research design was used, with quantitative research conducted prior to qualitative, with the qualitative Chapter (Chapter 7) aiming to further explore the understanding of the adolescent-parent relationship with regard to its impact on adolescent mental health problems. The quantitative chapters (Chapters 5 and 6) made a use of survey that aimed to quantitatively explore the association between Cypriot adolescents' mental health problems and their family. Adolescents from both community and clinical settings were used to address these aims throughout this Thesis. In support, parental perspectives were also explored for the purposes of the qualitative study.

Adolescence is a vital period during which many mental health problems arise. As argued by DuRant, Smith, Kreiter and Krowchuk (1999), a range of mental health problems exists during adolescence, and young people in Cyprus are no exception. The finding of this Thesis revealed that about 1 in 10 Cypriot adolescents from a community setting experience some form of mental health problems. As expected, within clinically referred adolescents, the prevalence of mental health problems was much higher. While Withdrawn was found to be the most common mental health problem in adolescents from the community setting, in adolescents from the clinical setting the most common mental health problem was found to refer to Social Problems. The difference in the prevalence rates between clinical and non-clinical adolescents was further supported by the 3rd study of this Thesis (Chapter 7), where the adolescents from a clinical setting reported having several interpersonal problems (including low self-esteem, low self-worth, low self-efficacy, emotional dysregulation and worry) which impact on their mental health, while no such indication of interpersonal problems was found within adolescents from the community sample.

Mixed results were found with regard to the impact of gender and age on adolescent mental health problems. Girls in the community sample had significantly higher scores than boys on Internalizing problems (Withdrawal, Somatic Complaints, Anxious/Depressed), while no significant difference was found on Externalizing problems and YSR total problems. The same pattern was found within clinically referred adolescents, with significant gender difference observed only for Internalizing problems.

In regards to the impact of age on adolescent mental health problems, significant differences were found between younger and older adolescents on YSR Internalizing and Total problems, with older ones scoring here than younger. No significant

difference was found regarding age and Externalizing problems. In addition, there was no age impact on Internalizing, Externalizing and total problems in clinically referred adolescents.

The findings revealed that attachment between adolescents and their parents is a crucial component in the development of mental health problems during adolescence. The studies in the Thesis support the hypothesis that attachment has an impact on adolescent mental health problems within both the community and clinical settings. However, the findings partially support the hypothesis that family communication and family functioning predict adolescent mental health problems. In Chapters 5 and Chapter 6, family communication did not predict any mental health problems in adolescents from either the community or clinical settings. However, mixed results were found for family functioning. Within adolescents from the community setting, two of the family functioning dimensions (i.e. Cohesion and Enmeshed) were found to predict Internalizing problems. With adolescents from the clinical setting, only one aspect of functioning (i.e. Satisfaction) predicted mental health problems. Interestingly, when the qualitative method was used (Chapter 7), family communication and parental involvement in adolescents' problem- solving were found to influence adolescent mental health. In addition, conflict, social isolation and parental separation were also found to be crucial components of an adolescent–parent relationship for clinically referred adolescents. Therefore, even though family communication and functioning did not statistically predict mental health problems, interviews with adolescents and their parents indicated that they do impact in some ways (See Chapter 7, section 7.4 and section 7.5). This reinforces the importance of using a mixed-method approach when examining the role of the family in adolescent mental health.

Finally, another important finding of the Thesis is that adolescent wellbeing in both the community and clinical settings is influenced by relationships outside the family environment. The results of the 3rd study (Chapter 7) showed that peer relationships play a crucial role during adolescence. While adolescents from the community sample showed that they value the importance of friendships, adolescents from the clinical setting experience difficulties within their peer relationships. As indicated by themselves, they have problems engaging with people and developing friendships, as they cannot trust them. The lack of trust within their peer relationships was the main reason for the difficulties they face, according to most of them.

8.3. Interpretation of Results

Overall, the incidence of mental health problems during adolescence in Cyprus is of concern for both the community and clinical settings. The rate identified in the Thesis (11.4% for adolescents from the community setting; Chapter 5) is very similar to the median prevalence of 12% reported by Verhulst and Koot (1995) in their review of 49 international studies conducted between 1965 and 1993. However, it should be noted that the prevalence rate found in these studies showed some variation depending on when the studies were published. For example, a more recent study conducted by Burnett-Zeigler et al. (2012) also showed a similar but notably higher prevalence rate (14.3%) as the one found in this Thesis. Furthermore, Cyprus can nonetheless be placed at the low end of the WHO prevalence rate (10%-20%; 2001), regarding adolescents from the community sample.

Additionally, the prevalence rate of 26.6% within the clinical setting, (Chapter 6) and its difference from that of community setting supports previous research which

argued that clinically referred adolescents report higher rates of emotional and behavioural problems compared to non-clinical adolescents (Brown & Wright, 2003). However, this rate was lower compared to that of other studies, involving clinically referred adolescents. For example, in a study that examined clinically referred adolescents from Norway, Kjelsberg and Nyrgen (2004) found a prevalence rate of 72%, while in another study by McCann et al. (1996) 53% of American adolescents in the care systems had high scores of emotional and behavioural problems. One reason for this may be difference among the participants compared within the studies. As argued by Garland et al. (2001) the prevalence rates of mental health disorders vary according to several health sectors. When they examined adolescents from five different sectors, they found that child welfare patients had higher prevalence rates compared to adolescents from the drug and alcohol services and the juvenile justice system (Garland et al., 2001).

The discrepancy between the rates of adolescent mental health problems within our study and those found in previous research may also be due in part to the measurements that were used to assess mental health problems. While, for example, the Burnett-Seigler, et al. (2012) study used the Brief Inventory Symptoms, this Thesis used the Youth Self-report questionnaire. The difference between results from Cyprus and other countries may present in this way because Youth Self Report is not sensitive enough to detect all types of mental health problems. For example, eating and psychotic disorders, which are more likely to be found in psychiatric patients during adolescence (Kjelsberg & Nyrgen, 2004), are not included in YSR. This may have leveled out the prevalence rate of clinically referred adolescents, and this possibility thus needs to be considered. Another possible reason may be the use of different cut-off scores to derive prevalence rates. Even though Achenbach- suggested cut-off scores were used in this

Thesis (Achenbach et al., 2002), they may underestimate mental health problems in relation to Cypriot society. Thus, further examination of the adaptation of the cut-off scores of the YSR in Cyprus should be conducted. However, the use of Youth Self-Report from several cultures, while considering the differences in the methods used, could lead to the conclusion that the consistency of our results with those of similar studies conducted elsewhere (Rescorla, et al., 2007) shows that the survey's methodology, using the Youth Self-Report, was an effective method of collecting data. The YSR was used in this Thesis because it is widely used in several countries and offers comparable scales across gender, age and family factors.

As seen, a significant number of adolescents presenting or not to public health care services is shown to have mental health problems. As this finding is crucial for Cypriot society, risk factors should be acknowledged in order to identify and prevent these problems. By further examining several risk factors that are associated with mental health problems among adolescents from the clinical setting, this could be achieved. There are several reasons why it could be argued that these rates were found, including psychosocial, social and cultural issues. Based on the findings of the Thesis, several factors emerge that seem to act as risk and protective factors for youth mental health (Table 8.1).

Table 8.1: Selected risk and protective factors found for mental health of Cypriot adolescents

	Risk factors	Protective factors
Psychological		
	Low self-esteem[3]	Social skills[3]
	Emotional dysregulation[3]	Problem-solving abilities[3]
Social		
Family	Insecure attachment[1,2,3]	Secure attachment [1,2,3]
	Enmeshed[1]	Cohesion[1]
	Family conflicts[3]	Involvement in family[3]
	Lack of communication[2,3]	Family satisfaction[2]
	Parental separation[3]	Understanding[3]
Peer	Social isolation[3]	Social skills[3]
	Problems engaging with peers[3]	Good friendships[3]

[1]Finding from Study 1/Chapter 5; [2]Finding from Study 2/Chapter 6; [3]Finding from Study 3/Chapter 7

Firstly, as found in the qualitative study, adolescents from the clinical setting experience several psychological risk factors such as low self-esteem, low self-worth and emotional dysregulation, that impact their mental health problems, and could be seen as risk factors. The association found between low self-esteem and adolescent mental health supports previous research, which demonstrated that adolescents with low self-esteem had poorer mental health (Trzesniewski, Donnellan, Moffitt, Robins, Poulton, & Caspi, 2006). At least three distinct traditions in the social sciences posit a link between low self-esteem and emotional and behavioural problems. Rosenberg (1965) suggested that low self-esteem weakens ties to society, as according to social-bonding theory, weaker ties to society decrease conformity to social norms and increase delinquency (Hirschi, 1969). Humanistic psychologists such as Rogers (e.g., 1961) have argued that a lack of unconditional positive self-regard is linked to psychological problems. Finally, neo-Freudians also posit that low self-regard motivates aggression. For example, Horney (1950) and Ansbacher (1956) theorized that aggression and antisocial behaviour are motivated by feelings of inferiority rooted in experiences of rejection and humiliation. In support, Tracy and Robins (2003) suggested that

individuals protect themselves against feelings of inferiority and shame by externalizing blame for their failures, which leads to feelings of anger toward other people. In addition, Erkolahti, et al. (2003) suggested that the association between low self-esteem and depressive symptoms comes from feelings of negative self-image.

Furthermore, based on this Thesis' findings, it could be argued that emotional dysregulation is one of the psychological risk factors associated with mental health problems. This result supports previous research, which found that emotional regulation is implicated in adolescent psychopathology, including both Internalizing and Externalizing problems (Silk, Steinberg, Morris, 2003). For example, Cole, Michel and Teti (1994) argued that Internalizing problems, such as depression, involve deficits in adolescents' ability to down-regulate their negative emotions and they experience difficulties in maintaining positive emotions. Similarly, a study by Dearing et al. (2002) showed that Externalizing problems were associated with emotional and behavioural dysregulation, mechanisms that particularly affect anger, which is theorized to be a feature of these disorders (Bradley. 2000). Therefore, it could be argued that adolescents who are less likely or less able to regulate negative affect during emotional experiences are more likely to report emotional and behavioural problems. Viewing mental health problems within an emotional regulation framework helps us to delineate mechanisms that are common across psychological disorders. For example, the maladaptive use of distraction may be common to disorders such as anxiety, post-traumatic stress disorder, borderline personality disorder, bulimia nervosa, and alcohol dependence. Identifying emotional regulation processing problems in psychopathology may inform interventions to effectively treat disorders.

Secondly, the family could be seen as risk factor in adolescent mental health. This is in agreement with empirical studies showing that there is a linkage between

problematic families and adolescents' emotional and behavioural problems (Lee & Bukowski, 2012; Kenny, Dooley, & Fitzgerald, 2013). This argument is supported by the findings of this Thesis, which show first that attachment predicts adolescent mental health problems; second that the significant differences regarding family factors (i.e. attachment, family communication and family functioning) between adolescents from the clinical and community settings could be evaluated as risk factors of these problems; and third, communication and aspects of family functioning, revealed by adolescents and their parents, were found to affect their mental health problems.

The overall findings of this Thesis confirm the hypothesis that is gradually becoming powerfully established, i.e. that psychopathology is associated with insightful insecurities in terms of attachment experiences (Dozier et al., 1999). The observed results in our clinical sample of adolescents with psychiatric problems and their differences from adolescents from a community setting revealed low levels of security and high levels of insecurity, a result that significantly predicts adolescent mental health problems. Notably, insecure attachment representations were expressed in the narratives of both adolescents from the clinical setting and their parents. These insecure modes of thoughts may be summarized as: 1) feelings of rejection in some cases; 2) lack of trust; 3) no understanding; 4) negative criticism from parents.

These thoughts and feelings were found to lead to a negative attitude toward attachment figures and an undervaluing stance towards attachment relationships, commonly linked to adolescents' symptomatology (Wallis, & Steele, 2001). Adolescents classified as having insecure attachment patterns report significantly higher mental health problems due to using either a deactivation or a hyperactivation of the attachment behavioural systems (Wallin, 2007). While deactivation can be seen in avoidant or dismissing attachments, hyperactivation is the adaptive strategy of

individuals who are ambivalent (Main, 1990). Thus, the interpersonal difficulties and mental health problems reported by adolescents from the clinical setting could be consistent with such insecurely attachment strategies. However, in the absence of data from different types of insecure attachment, the conclusions of this study remain ambiguous.

Evidence from this Thesis also suggests that some forms of family functioning impact on adolescents' mental health. Although quantitative studies failed to prove the association between family functioning and adolescents' emotional and behavioural problems, adolescents from the clinical setting reported overall family dysfunction and specific aspects of family dysfunction, including conflict, reduced family support and a lack of parental involvement in their lives, their problem-solving and decision-making (Chapter 7). In addition, the association found between satisfaction and mental health problems (Chapter 6) also suggests that adolescents' dissatisfaction with family functioning is another aspect of concern. Therefore, the negative effects of parent–adolescent conflict and a lack of parental involvement in adolescents' lives showed that family dysfunction is predictive of some symptoms occurring in clinically referred adolescents. These findings support previous research examining Internalizing (Hughes & Gullone, 2008) and Externalizing problems (Frick & Jackson, 1993). For example, by reviewing the existing literature on Internalizing problems, Hughes and Gullone (2008) provided considerable evidence to suggest that adolescent internalizing symptoms and disorders are associated with poorer functioning at various levels of the family system.

Additionally, Frick and Jackson (1993) argued that the relationship between family functioning and childhood antisocial behaviour has bidirectional effects, which take into account a child's effect on the family environment. This argument was partly supported in the present study, as findings from the qualitative study (Chapter 7)

showed that control and conflicts within family environment were influenced by adolescents' behaviours. However, as the present research fails to examine the reciprocal relationship between adolescent emotional and behavioural problems and family functioning, further research should be conducted on this.

Such a relationship between functioning and mental health problems may also be linked to insecure attachment figures experienced by adolescents from the clinical setting. As previous research has indicated, attachment contributes to conflict with parents and low self-esteem (Richter, 2006) and to problem-solving (Kerig, 1996). This is somehow expected, as problem-solving requires collaboration in order to find a solution that takes into account both adolescents' and parents' expectations. However, in order to achieve such collaboration, self-disclosure, understanding and a willingness to consider different opinions as valid is required. As argued by Shi (2003), such behaviour requires individuals to put aside anxiety and defensiveness and to rely on the other individual, a procedure that is difficult for adolescents with insecure attachment, as they are less able to use collaboration in an attempt to resolve a conflict (Shi, 2003). This argument is supported by the results of this Thesis, as adolescents who expressed low levels of attachment with their parents often experience conflict with their parents.

Conflict was also found to be a consequence of the lack of communication. Even though communication was not found to be statistically associated with adolescents' mental health problems, the qualitative data showed that it is a crucial component of the family environment, as a lack of communication experienced between adolescents from the clinical setting and their parents could be seen as a reason for several aspects of the adolescent-parent relationship, including conflict and no involvement in family rituals and routines (Chapter 7). This supports previous research which argued that a lack of communication in families with clinical adolescents significantly affects the adolescent-

parent relationship as it affects the participation in family rituals and, as a result, it does not create opportunities for discussion and problem-solving (Kiser, et al., 2005). Therefore, it could be argued that this finding provides evidence for the importance of communication to adolescents from the clinical setting.

Another family risk factor that was observed in both adolescents and their parents was parental separation/divorce. Divorce could be seen as a stressful event for adolescents that may cause family conflict, economic hardship and family disorganisation (Aseltine, 1996). Previous research has shown that divorced families are characterised by having higher levels of negativity and lower levels of support and parental involvement in the child's life (McLanahan & Sandefur, 1994), by financial distress as consequence of the changes in the family's economic circumstances (Amato & Keith, 1991); and by changes to daily life that becomes unstructured and chaotic for the family members (Astone & McLanahan, 1991). These characteristics were supported by our findings, as it was observed that within the clinical sample, families experienced conflict and low levels of parental involvement. Specifically, parental divorce may firstly be the reason for adolescent-parent conflict and secondly for stressors that cause interpersonal problems within adolescents from the clinical setting.

As discussed, parents promote emotional and behavioural problems during adolescence because of inconsistent disciplinary measures and deficits in support, monitoring, involvement and communication (Patterson, DeBaryshe, & Ramsey, 1989). On the other hand, it could also be argued that adolescent's mental health problems raises parental tolerance of deviant behavior (Bell & Chapman, 1986), and thus decreases parental control attempts. This was supported from the present findings, as parents' desires in Chapter 7 illustrated that adolescents' antisocial and aggressive behaviors impact parental styles and behaviours. For example, if adolescent's behavior

becomes threating or "out of control", parents indicated that they may respond by becoming less supportive and controlling. There are two ways to explain this. One the one hand, it might be that as externalizing behaviours develop, parents experience decreasing success with their efforts to supervise their adolescents, and those who engage in such behaviours employ greater effort to evade their parents' supervision, reducing the success of parents' efforts (Shek, 2008). On the other hand, parents might emotionally reject adolescents who display such behaviours because of their antisocial character (Baumrind & Moselle, 1985).

Thirdly, the fact that adolescents from the clinical setting and their parents reported severe problems in peer relationships (Chapter 7) could lead to the conclusion that the social environment and, specifically, peer relationships seem to play a vital role as well, especially in adolescents' self-view and, as a consequence, in their mental health. For example, adolescents from the clinical setting described their feelings of social isolation and problems in developing peer relationships. This supports previous research on the positive relationship between problematic social relationships and Internalizing problems (Riesch, Jacobson, Sawdey, Anderson, & Henriques, 2008), aggressive behaviour (Fite, Rubens, Preddy, Raine, & Pardini, 2014) and substance use (Prinstein & La Greca, 2004).

Developmental theorists (e.g. Piaget, 1932; Sullivan, 1953) have long argued that peer interaction is an indispensable context within which children and adolescents improve their cognitive and social-cognitive competence, the ability to regulate interpersonal skills. It stands to reason, therefore, that adolescents who do not avail themselves of opportunities to interact with their peers, may be considered more vulnerable to experiencing mental health problems because of not developing those regularities thought consequential to peer interchange. In addition, adolescents who are

socially isolated fail to feel attached to important institutions (e.g., school), and are therefore linked to the development of depression and anxiety symptoms (Bierman, 2004). Moreover, adolescents who are classified as having ambivalent attachment patterns also found it difficult to be sociable, maybe as a result of their need for others' acceptance and approval (Bartholomew & Horowitz, 1991). Both insecurity and problematic social relationships were characteristics found in adolescents diagnosed with mental health problems.

Despite these risk factors, emphasis should also be placed on the fact that most adolescents from community settings do not have mental health problems. The interpersonal characteristics of adolescents from a community setting as well as the characteristics of their relationship with their parents could be seen as protective factors. Brendgen, Vitaro, Tremblay and Lavoie (2001) found that positive parenting practices, including involvement, engagement and support, help protect young people from exhibiting aggressive and delinquent behaviour that could lead to later violence. Conversely, social acceptance may help buffer the negative impact of aggressive behaviour on future maladjustment (Prinstein & La Greca, 2004). This supports the findings of the present Thesis which showed that a sense of connection, trust and understanding and parental support of adolescents' personal abilities and well-being positively impact on adolescents' problem-solving, decision-making and social skills (Chapter 7). As adolescents from the community setting described in their interviews, their ability to engage with and trust their parents encourages them to discuss any personal or social issues that they face. This encouragement, in turn, leads them to take what they consider to be the "right" decision for them. These findings suggest that consistent and engaging parenting, which is characterized by affiliation and support,

provides adolescents with the skills necessary for developing valuable peer relationships and a feeling of independence.

Moreover, adolescent emotional and behavioural problems are not equally distributed among demographic groups, involving gender and age. Firstly, in both the community and clinical settings, no significant difference was found between gender and overall mental health problems. As argued in Chapter 5 (Section 5.5) and Chapter 6 (Section 6.5), gender could not be interpreted as a risk factor in mental health problems. This finding contrasts with previous research. For example, Rescorla et al. (2007) found gender difference in both Externalizing and Internalizing problems as they compared results from many societies. Specifically, their findings showed that girls in most societies tended to score higher on Internalizing problems, while boys in most societies tended to score higher on Externalizing problems. The most consistent age trends across societies, that they found, were increases with age for Internalizing problems and decreases with age for Externalizing problems. These differences were not consistent with the results of this Thesis. However, the association found between Internalizing problems and gender in adolescents from community settings (only in Study 1; Chapter 5) does support previous research. For example, in a meta-analysis of over 20 cross-sectional studies, Leadbeater et al. (1995) found significant gender differences regarding depression. In addition, Jose and Ratcliffe (2004) found also gender differences as regards depression, anxiety and psychosomatic complaints. Specifically, they found that girls reported significantly more stressful events from the ages 12 to 17 than boys, and girls showed higher levels of internalizing as well as higher perceived stressor intensity than boys (Jose, & Ratcliffe, 2004). This association could be a first step towards the further exploration of the impact of gender in Cypriot adolescents.

Although no significant gender differences were seen regarding emotional and behavioural problems, there were trends showing that, compared to boys, girls had more mental health problems, as indicated through their higher scores on the YSR as well as on Internalizing problems. In contrast, boys had higher scores on Externalizing problems. These observations support previous research, which argued that emotional disturbances might be expressed as health complaints in girls and acting out or aggressive behaviour in boys (Haugland, et al., 2001). Thus, behavioural role differences may determine these differences. In addition, the earlier maturation of girls may be another reason for observing these mean differences. Previous research indicated that puberty, seen as early physical development, is viewed as a risk factor in a variety of problems and psychopathology, as mental health problems and their symptoms depend on the individual's qualities and predispositions (Mendle, Turkheimer, & Emery, 2007). However, as seen in Section 5.4.1, and 5.4.2 (Chapter 5) the effect of gender differences on mental health problems varies according to the different syndromes and consequently, according to the different symptoms in the questions too. Therefore, it could be suggested that gender differences regarding Cypriot adolescents' mental health are more complex than they appear to be. In order to produce a more accurate conclusion, further research focusing specifically on the impact of gender on adolescent mental health is necessary.

Secondly, while previous research has indicated that mental health problems significantly increase with age in community samples and remain stable within clinically referred adolescents (Simmel, Barth, & Brooks, 2007), this Thesis, on the one hand, supports previous research from community samples but contrasts, on the other hand, with the research-assessed clinical sample. As found, mental health problems significantly increase with age in adolescents from the community sample, but no age

difference was found in the second study (Chapter 6) when clinically referred adolescents were examined. However, as this is not a longitudinal study, no conclusion could be made on the trajectories of mental health problems among adolescents.

Finally, the results must be viewed with some consideration of Cypriot culture. Although this Thesis did not assess cultural issues with regard to adolescent mental health, an interpretation of the findings leads to the conclusion that Cypriot cultural issues could also impact adolescents' wellbeing. As argued by Canino and Alegria (2008), culture could contribute to the risk and protective factors of any disorder, to the comorbidity of the disorders and to the treatment response; thus they should be considered. There is evidence that an individual's cultural background colours every surface of the illness experience, from symptomatology to the expression of feelings and emotions (Canino & Alegria, 2008), and Cyprus is no exception. In a society, like Cyprus, characterized by rapid social change and a lack of explicit norms regarding this transition (adolescence), there are likely to be variations in the handling of adolescents

The family is a basic unit, which has deep roots in Cypriot culture. It means love and belonging and coexisting as well as safety, security and unity. So, families in Cyprus can be a source of both potential resources for health or possible threats to mental health. Cyprus is a small, close and prosperous community where young people have support from their parents until early adulthood. Moreover, most of the parents of the participants experienced the 1974 war on the island. Experiencing such a traumatic event, and going through so many difficulties during their own adolescence, has probably had an influence on the way parents raise their children. They may well try to provide psychological as well as physical support to their children in order to give them an easier life. Parenting practices such as parental protection, monitoring, closeness and warmth are characteristics of Cypriot parents. However, the fact that they try to protect

their adolescents from any risk may put pressure both on them and their children. This pressure, in combination with the protective behaviour which characterizes Cypriot parents, may lead to restrictions being placed on adolescents that do not give them psychological autonomy. In addition to this, parental approval observed in the parents of adolescents from both community and clinical settings (Chapter 7) shows that Cypriot parents have the need to either approve or disapprove of their adolescent children's friends or their activities with their friends, a parental behaviour that also affects adolescents' autonomy.

During adolescence, young people develop a need to become autonomous by obtaining some control over their lives (Hill & Holmbeck, 1986). The current findings concern first parental and peer relationships and, second, the adolescents' need to take their own decisions and solve their own problems highlights the importance of autonomy among Cypriot adolescents. This finding also supports the universal beneficial developmental effect of autonomy on healthy development among youth, across cultures and nations (Sheldon, Elliot, Ryan, et al., 2004). Thus, overprotection and control that sometimes occurs in Cypriot families may impact negatively on adolescents' well-being, as it may block their need to feel independent.

8.4. Limitations of the Thesis - Directions for Future Research

Some of the limitations of this Thesis make its findings suggestive rather than conclusive. Future research should overcome these limitations and investigate in greater depth the psychosocial factors involved in adolescent mental health problems. Although the specific limitations of each study have been discussed in each Chapter separately,

here some more general limitations are discussed and some suggestions are made of further research that could overcome these limitations.

Firstly, Chapters 5 and 6 are cross-sectional studies and are therefore open to criticism of this research design. The main limitation of the cross-sectional design is the inability to draw conclusions about causality (Aldwin, 2007). Therefore, longitudinal studies are needed to overcome the problems of cross-sectional studies, in order to bring about a better understanding of the developmental psychopathological framework of mental health problems in Cypriot adolescents. Developmental psychopathologists have suggested that mismatches between the developmental needs of adolescents and the contexts to which they are exposed should be identified (Ciccheti & Rogosch, 2002). Accordingly, it is particularly useful to examine the longitudinal trajectories of adolescents' mental health problems. Longitudinal analyses would help clarify the nature of the associations among adolescents' emotional and behavioural problems and their family influence. For example, there is evidence of reciprocal causation between patterns of parental control and youth difficulty (Patterson, 1982). Thus, as this research cannot interpret clearly whether or not the association between family and adolescent mental health is due to the impact of family on these problems or vice-versa, further research should aim to examine the nature of the relations between parenting practices and adolescents' psychopathology.

Secondly, Chapters 5 and 6 used adolescents' responses to Self-report questionnaires. Ideally, the YSR should have been completed by their parents. The fact that the association between adolescents' mental health problems and family in this Thesis was conceptualized by interviews with parents as well adds support to the need for parental completion of the YSR. Such data could have provided us with more accurate validity of the impact of family on adolescent mental health. On the other hand,

this method is justified, as adolescents are important informants for assessing and reporting their attitudes and emotions that may not be apparent to others. Moreover, as argued by Kamphaus and Frick (1996), the validity of self-report on mental health problems tends to increase in adolescence, whereas the validity of parents' and teachers' reports tend to decrease during this time.

Thirdly, there are also some methodological issues related to Chapters 5 and 6, For example, the use of cut-off scores in the YSR (Achenbach, 1991b) interfere the prevalence rates found in this research, as they were developed in an American Sample. Thus, further research in evaluating YSR cut-off scores in the Cypriot population could help explore more accurate prevalence rates of adolescents' mental health problems in Cyprus. In addition, Chapter 5 and 6 used the FACES scale that even though has been previously used in Greek, it has never been used in Cypriot population. Thus, it is not known if the content of its items reflect Cypriot culture. Further attention should be given to the adaptation of this scale to a Cypriot sample.

Fourthly, criticism should also be made of the division made regarding the age of the participants. Although age categorization was based on the fact that there may be differences in social competences obtained in the two stages of secondary education in Cyprus, this categorization may have affected the outcomes in both Chapters 5 and 6 (i.e. age differences in adolescents' mental health problems; age differences in family factors). There may be similarities or differences between all ages (12 to 17 years old). Therefore, new analysis should be made with age used as a continuous variable in order to obtain more accurate results in relation to the effect of age on adolescents' mental health problems.

Fifthly, it has been found in Chapter 7 that one risk factor in adolescent mental health is parental separation. This finding leads to the need to assess more socio-demographic information within a study of mental health. This research did not involve much sociodemographic information regarding family structure. Establishing an association between the family structure and adolescent mental health through statistical significance would be an advantage for further understanding family risk factors in mental health problems during adolescence.

Lastly, a more in-depth analysis of the symptomatology of mental health problems among adolescents in both the community and clinical settings is required. As the results show, low self-esteem and emotional regulation also impact adolescents' mental health problems. Thus, further research, looking at which symptoms are common than others, will help in identifying specific symptoms during interventions in order to prevent mental health problems.

8.5. Implications of the Thesis

The use of well-validated and reliable measurements within clinically referred and non-clinical adolescents, gives significant power of the findings, as they could be generalized within a risk sample that needs attention and provokes concern. This Thesis has indicated that empirically-based standardized self-reports could provide methodologically sound information across the Cypriot population. Adolescents responded in a fairly similar way to the Youth Self-Report as those from other cultures (Verhulst, et al., 2003) despite large variations in language, customs, religion, socio-economic circumstances, and health care systems.

The use of the Youth-Self report indicates that mental health problems affect Cypriot adolescents and this should be acknowledged by both the health services and the Government. Since adolescence is a time when most people establish themselves and their friendships (Patel, Flisher, Hetrick & McGorry, 2007), and since mental health problems may reduce the likelihood of these tasks, mental health problems have a substantial effect on social outcomes that extend into adulthood. Therefore, the public health implication of this Thesis' findings is that focus should be placed on interventions that will aim to prevent the progression of these problems.

Furthermore, having explored the importance of attachment in the field of adolescent mental health problems, and the significant differences occurring within family environments between clinical and non-clinical adolescents, these findings make an important contribution in the factors that affect the trajectories of Internalizing and Externalizing problems among clinical and non-clinical adolescents. Therefore, there might be a potential place to identify adolescents' mental health needs with regard to their family environment and use them a source for providing support within health services.

These interventions, as well as the support provided to young people, could be developed in a youth-friendly ways and disseminated through both community-based and clinical-based channels, such as educational settings, and mental health units and outpatient services. Schools, in particular, could offer a unique setting for mental health promotion in young people, via the emphasis on reducing risk factors and strengthening protective factors. A related strategy would be to educate the community to improve its knowledge of the onset phase of mental disorders in adolescence and how to seek help locally. In support, as the findings show that adolescents with mental health problems

have multiple problems, including both interpersonal and social, specialized and multidisciplinary care may also be required.

With regard to the findings from 3rd Study (Chapter 7), they support the claim that the adolescent-parent relationship in both clinical and non-clinical families impacts on adolescents' well-being, An awareness of the differences between the two sample groups will helpfully prompt healthcare professionals to investigate and explore issues with parents and to adapt their practice accordingly.

CHAPTER 9: CONCLUSION

In conclusion, this Thesis has recognized that adolescents have their own unique mental health challenges that are linked with the effects of family environment. Many studies have examined several family factors in association with various mental health problems, but very few have combined attachment, communication and functioning in association with the trends in adolescents' emotional and behavioural problems; this Thesis is one of them. Significant differences were found between adolescents from community and clinical settings, indicating that the presence of mental health problems in Cypriot adolescents is associated with a lack of attachment, dysfunctional families and the inability of the individuals concerned to develop friendships.

Adolescence is unique as it involves two distinct changes: moving from childhood to adolescence, and preparing for adulthood. This transition is influenced by the society as it requires young people to master more complex skills, such as relinquishing their dependence on their family and assuming responsibility for their decision-making (Wenar, & Kerig, 2005). As the results demonstrate, this transition is facilitated by the importance of family and peer relationships. Even though adolescents give emphasis to self-esteem and self-regulation, still, the family context is influential as the level of attachment affects their mental health and social relationships with their peers. In addition, a better communication between adolescents and their parents should be in a priority as well, as it is a way of improving adolescent - parent relationship and avoiding conflicts that negatively impact adolescents' psychological well-being. Functioning within the family should be altered, as parents must readjust their expectations to allow the adolescents' need to increase independence and autonomy.

The present data provides novel information. It sheds more light on possible family factors, which are responsible for the development of mental health problems during adolescence, especially in counties like Cyprus were research has yet to evolve. Possibly a clinical challenge is helping these young people engage with the social and emotional implications of their troubled past and/or ongoing attachment adversities, with both their parents and peers. Furthermore, evaluable contribution to a clinical setting would be to use the present findings towards more effective interventions for unbalanced and disorganized families, in order to cope with dysfunctions and improve communication.

In addition, this is a pioneer study examining the prevalence of mental health problems in Cypriot adolescents. Moreover, there is too little systematic research evidence concerning the risk and protective factors for adolescent mental health in Cyprus. Therefore it is strongly recommended that more studies be carried out to explore the above factors. As this Thesis suggests that both friends and family impact adolescent wellbeing, future studies should involve multifactorial causes of mental health problems among adolescents, rather than only one risk factor, e.g. only family.

Once family risk and protective factors for adolescent mental health problems are identified, the next challenge is to develop prevention programs for high-risk families. This Thesis can help shape the direction of current and future research and can provide the baseline context for interpreting new information as additional data becomes available. Future research should firstly seek to clarify why attachment is a stronger predictor than family functioning and family communication and, secondly, why gender and age do not predict mental health problems in Cypriot adolescents.

Moreover, further understanding is required of the mechanisms mediating the relationship between family factors, adolescent mental health problems and cultural underpinnings.

APPENDICES

Appendix I: Ethical Approval for Study 1 & Study 2

Ethics Application Ref: PSY 10/ 055

Jan Harrison

Sent: 08 December 2010 11:29

To: Constantina Demetriou

Cc: [redacted]

Dear Constantina,

Ethics Application

Applicant: Constantina Demetriou

Title: Mental health of young people in Cyprus. The influence of family on mental health need among children and adolescents in community and clinical settings.

Department: Psychology
Ref: PSY 10/ 055

I am pleased to confirm that the above application has been approved by Chairs Action on behalf of the Ethics Board. We do not require anything further from you in relation to this application. However, please note the following comments:

Comments:
1) Confirmation required that appropriate insurance cover is in place as the project is to place as the project is to take place overseas.

2) A copy of approval from the Ministry in Cyprus is needed once obtained.

We am still awaiting confirmation from our finance department regarding point 1) and we will let you the outcome as soon as possible.

Regards,

Jan

Jan Harrison

Ethics Administrator

Tel: 020 8392 5785

Room 208, Grove House, Froebel College.

Consider the environment. Please don't print this e-mail unless you really need to.

Appendix II: Ethical Approval from Ministry of Education and Culture (Study 1 & 2)

REPUBLIC OF CYPRUS
MINISTRY OF EDUCATION & CULTURE

DIF
SECON

File No: 7.19.46.7/16
Tel. No: 22800630/631
Fax No: 22428268
E-mail: circularsec@schools.ac.cy

Ms. Constantina Demetriou
[redacted]

Subject: Grant of licence to perform a survey

As per your letter sent to the Educational Research and Evaluation Centre dated 05 October 2010, we would like to inform you that your application perform a survey on *"Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings"*, within the framework of your doctoral project at the Roehampton University, has been approved. Provided that you will take into consideration the proposals of the Educational Research & Evaluation Centre sent for your information and that you should observe the following conditions:

1. You should obtain the Headmasters' consent of the schools participating in the survey;
2. Participation of students should be optional;
3. You should obtain the consent of parents and guardians participating in the survey;
4. The survey should affect neither the teaching time nor the smooth operation of the school;
5. You should process the students' details in such a way as to ensure that they remain anonymous;
6. The results of the survey should be communicated to the Ministry of Education and Culture.

We wish you good luck with your survey.

Dr. Zina Poulli
Director of Secondary Education

ΓΡΑΦΕΙΟ ΤΥΠΟΥ & ΠΛΗΡΟΦΟΡΙΩΝ - PRESS & INFORMATION OFFICE

I hereby certify that this text is a true translation of the attached document

I hereby certify that the signature of the translator is that of Emmanouil TYRAKIS
(Sgd.)....
for Director
Press and Information Office
REPUBLIC OF CYPRUS
17/01/2011

Appendix III: Ethical Approval from Cyprus National Bioethics Committee (Study 2)

CYPRUS REPUBLIC
CYPRUS NATIONAL BIOETHICS COMMITTEE

File No: ΕΕΒΚ ΕΠ 2011/05
Tel.: 22809038/039
Fax: 22353878

Mr. Jan Harrison
Secretary of the
Roehampton University Ethics Committee

05th of September 2011

Dear Mr. Harrison,

Research proposal "Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings"

Following the request of your student Mrs. Constantina Demetriou, we confirm that the above research proposal, with principal investigator, Mrs. Demetriou, has been approved by the Review Bioethics Committee for Biomedical Research on Human Beings and their Biological Substances and the Clinical Trials on Medicinal Products of Human Use, on the 7th of June 2011, subject to the condition that a copy of the IPPA Questionnaire will be submitted to the Committee after its been weighted-validated on the Cypriot population.

Yours sincerely,

Dr. Andreas Hadjisavvas
Chairman
Review Bioethics Committee for Biomedical Research
on Human Beings and their Biological Substances
and the Clinical Trials on Medicinal Products of Human Use

Egkomi Medical Center, Nikou Kranidioti, 2411 Nicosia
Email: cnbc@bioethics.gov.cy *Website:* www.bioethics.gov.cy

Appendix IV: Ethical Approval from Ministry of Health / Mental Health Services (Study 2)

REPUBLIC OF CYPRUS

Our Ref.M.H.S.5.34.3
Tel.no.0035722402101
Fax.no.0035722487941

MINISTRY OF HEALTH
MENTAL HEALTH SERVICES
1452 NICOSIA, CYPRUS

4th March, 2014

Mrs Constantina Demetriou,

I inform you that your research proposed titled "Health of young people in Cyprus. The influence of family on health and well being among children and adolescent in community and clinical settings" , has been approved be the Cyprus Mental Health Services. You are permitted to utilize a number of the patients in our services, mainly adolescents between the ages of 12-17.

Dr.Yiannis Kalakoutas,
Director
Mental Health Services

MINISTRY OF HEALTH * CYPRUS * MENTAL HEALTH SERVICES

Appendix V: Invitation Letter for Schools (Study 1)

Roehampton University London

ETHICS BOARD

LETTER TO THE HEAD TEACHER OF SCHOOL

Title of Research Project:

Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Dear Head teacher,

I am a researcher based in the Department of Psychology, Roehampton University in London. I am conducting a large project in Cyprus, which aims to examine the predictors of health and wellbeing of children and adolescents in community and clinical settings under the supervision of Professor Cecilia Essau.

Adolescents aged 13 to 16 years old will be asked to complete a set of questionnaires, which will take a total of about 30 minutes to complete. These questionnaires will be used to assess: (i) health and wellbeing, (ii) normal variation in aspects of mood and personality, (iii) family structure and functioning, (iv) what relationship and support people experience from their family members, (v) major life events experienced within the past 12 months, and (vi) their age, gender, etc. For these purposes, the questionnaires contain questions related to behavioural, emotional and physical problems of the child, fears, anxieties, traumatic events that may have occurred in the child's life and any post-traumatic symptoms. There will also be questions about the ability to concentrate, social relationships with peers, relationships with parents and their pubertal status. These questions will help to analyze how family influences child's wellbeing as well as social, cognitive and developmental functioning. It is important to clarify that the questionnaires are not designed to diagnose mental illness.

The adolescents will fill out the questionnaires during class and in the presence of their teacher. The day and time of the research will be agreed in advance with you, in order to not interrupt any lessons. I will administer the questionnaires to the adolescents, and I will be present to provide assistance if needed and to ensure confidential and independent responding. I have been Criminal Records Bureau (CRB) checked.

Only adolescents who have written and signed consent forms to participate in the present study from their parents will be allowed to take part in the project. These forms will be given to them in advance. Before starting the questionnaire completion, the adolescents will be asked to return the consent forms. The adolescents are free to

withdraw at any time, without giving a reason. However, they will be aware that data in summary form may already have been used for publication at the time of request.

All data relating to adolescents' participation in this study will be held and processed in the strictest confidence, in accordance with the Data Protection Act (1998). No one outside of the research team will have access to any of the data and anonymity will be protected at all times.

We would be most grateful if you would be able to support this research by allowing us to meet with adolescents at your school. Please could you confirm this by signing the provided consent slip below?

If you have any questions, please feel free to contact me by telephone on +44 7515255507 / +357 99 310707 or by email at C. Demetriou@roehampton.ac.uk.

If you prefer, I would be more than happy to come in and meet with you to discuss this further. I look forward to hearing from you.

Yours sincerely,

Constantina Demetriou

Department of Psychology,

Roehampton University,

Whitelands College,

Holybourne Avenue,

London, SW15 4JD

Examples of questions that will be used in this project

1. Compared to others of your age, how well (worse, same, better) do you:

a. Get along with your brothers & sisters?

b. Get along with other children?

c. Behave with your parents?

d. Do things by yourself?

2. I worry about things

□ Never □ Sometimes

□ Often □ Always

3. I am afraid of being in small closed places, like tunnels or small rooms

□ Never □ Sometimes

□ Often □ Always

4. I feel unhappy, sad and depressed

□ Not True □ Somewhat True □ Certainly True

5. There are strict consequences for breaking the rules in our family.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

6.Family members feel guilty if they want to spend time away from the family.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

7.Family members feel closer to people outside the family than to other family members.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

8.Family members try to understand each other's feelings.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

9.Your family's ability to resolve conflict.

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Generally Satisfied	Very Satisfied	Extremely Satisfied

10.Your family's ability to cope with stress.

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Generally Satisfied	Very Satisfied	Extremely Satisfied

Consent Form

I agree for the adolescents in my school to take part in the study (Project's title: Mental health of young people in Cyprus. The influence of family on mental health need among children and adolescents in community and clinical settings) and I understand that they have the right to withdraw from the study at any time.

School name: _____

Head Teacher's Name: _____

Head Teacher's Signature: _____

Date: _____

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the investigator. However if you would like to contact an independent party please contact the Head of Department or the Director of Studies or the external Cypriot Supervisor.

Director of Studies Contact Details:

Name: Professor Cecilia Essau

University Address: Department of Psychology, Roehampton University, Holybourne Avenue, London, SW15 4JD

Email: c.essau@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3647

Head of Department Contact Details:

Name: Dr Diane Bray

University Address: Department of Psychology, Roehampton University, Holybourne Avenue, London, SW15 4JD

Email: d.bray@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3627

External Supervisor Contact Details:

Name: Dr Xenia Anastasiou - Hadjicharalambous

University Address: Department of Psychology, University of Nicosia, 46 Makedonitissas Avenue, Nicosia, 24005

Email: hadjicharalambous.x@unic.ac.uk

Telephone: + 357 22 351274 ext: 112

Appendix VI: Invitation Letter for Parents (Study 1)

Roehampton University London

ETHICS BOARD

LETTER TO THE PARENTS IN SCHOOL SETTINGS

Title of Research Project:

Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Dear Parent/Guardian,

I am a researcher based in the Department of Psychology, Roehampton University in London. I am conducting a large project in Cyprus, which aims to examine the predictors of health and wellbeing of children and adolescents in community and clinical settings under the supervision of Professor Cecilia Essau.

Adolescents aged 13 to 16 years old will be asked to complete a set of questionnaires, which will take a total of about 30 minutes to complete. These questionnaires will be used to assess: (i) health and wellbeing, (ii) normal variation in aspects of mood and personality, (iii) family structure and functioning, (iv) what relationship and support people experience from their family members, (v) major life events experienced within the past 12 months, and (vi) their age, gender, etc. For these purposes, the questionnaires contain questions related to behavioural, emotional and physical problems of the child, fears, anxieties, traumatic events that may have occurred in the child's life and any post-traumatic symptoms. There will also be questions about the ability to concentrate, social relationships with peers, relationships with parents and their pubertal status. These questions will help to analyse how family influences child's well-being as well as social, cognitive and developmental functioning. It is important to clarify that the questionnaires are not designed to diagnose mental illness.

The questionnaires will be completed anonymously. Anonymity will be protected as far as possible, but please be aware that due to the longitudinal nature of the study, a database will be kept which will allow participant number to be linked with participant contact details. The completed questionnaires will be kept confidential and only be used for research purposes. They will be accessible to the researcher only. Only adolescents who have written and signed consent forms to participate in the present study from you will be allowed to take part in the study. These forms will be given to them in advance in order for you to have time to read them carefully and take your

decision about allowing your child to participate. Before starting the questionnaire completion, the adolescents will be asked to return the consent forms. The adolescents are free to withdraw at any time, without giving a reason. However, they will be aware that data in summary form may already have been used for publication at the time of request.

Your child will be asked to complete the questionnaires at a specific time, date, and a classroom in the school as agreed by his/her head of school and in the presence of his/her teacher. I will administer the questionnaires to the adolescents, and I will be present to provide assistance if needed and to ensure confidential and independent responding. I have been Criminal Records Bureau (CRB) checked. It is important to remember that your child is free to withdraw at any time, without giving a reason.

All data relating to your child's participation in this study will be held and processed in the strictest confidence, in accordance with the Data Protection Act (1998). No one outside of the research team will have access to any of the data and anonymity will be protected at all times.

If you are happy for your child to participate in our study, I would be most grateful if you could please kindly complete and return the consent letters attached.

If you have any questions, please feel free to contact me by telephone on +44 7515255507 / +357 99 310707 or by email at C. Demetriou@roehampton.ac.uk.

Yours faithfully,

Constantina Demetriou

Department of Psychology,

Roehampton University,

Whitelands College,

Holybourne Avenue,

London, SW15 4JD

P.S. Please find below some examples of questions that will be used in this project. Please be aware that some of the questions may be sensitive for your child. However, the participation of your child is voluntary.

1. Compared to others of your age, how well (worse, same, better) do you:

a. Get along with your brothers & sisters?

b. Get along with other children?

c. Behave with your parents?

d. Do things by yourself?

2. I worry about things

□ Never □ Sometimes

□ Often □ Always

3. I am afraid of being in small closed places, like tunnels or small rooms

□ Never □ Sometimes

□ Often □ Always

4. I feel unhappy, sad and depressed

□ Not True □ Somewhat True □ Certainly True

5.There are strict consequences for breaking the rules in our family.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

6.Family members feel guilty if they want to spend time away from the family.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

7.Family members feel closer to people outside the family than to other family members.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

8.Family members try to understand each other's feelings.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

9.Your family's ability to resolve conflict.

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Generally Satisfied	Very Satisfied	Extremely Satisfied

10.Your family's ability to cope with stress.

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Generally Satisfied	Very Satisfied	Extremely Satisfied

Appendix VII: Invitation Letter for Adolescents (Study 1)

Roehampton University London

ETHICS BOARD

LETTER TO ADOLESCENT IN SCHOOL SETTINGS

Title of Research Project:

Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Dear Participant,

I am a researcher based in the Department of Psychology, Roehampton University in London. I am conducting a large project in Cyprus, which aims to examine the predictors of health and wellbeing of children and adolescents in community and clinical settings under the supervision of Professor Cecilia Essau.

Adolescents like you, aged 13 to 16 years old, will be asked to complete a set of questionnaires, which will take a total of about 30 minutes to complete. These questionnaires will be used to assess: (i) health and wellbeing, (ii) normal variation in aspects of mood and personality, (iii) family structure and functioning, (iv) what relationship and support people experience from their family members, (v) major life events experienced within the past 12 months, and (vi) their age, gender, etc. For these purposes, the questionnaires contain questions related to behavioural, emotional and physical problems of you, fears, anxieties, traumatic events that may have occurred in your life and any post-traumatic symptoms. There will also be questions about the ability to concentrate, social relationships with peers, relationships with parents and your pubertal status. These questions will help to analyse how family influences your well-being as well as social, cognitive and developmental functioning. It is important to clarify that the questionnaires are not designed to diagnose mental illness.

The questionnaires will be completed anonymously. Anonymity will be protected as far as possible, but please be aware that due to the longitudinal nature of the study, a database will be kept which will allow participant number to be linked with participant contact details. The completed questionnaires will be kept confidential and only be used for research purposes. They will be accessible to the researcher only. Only

adolescents who have written and signed consent forms to participate in the present study from you will be allowed to take part in the study. These forms will be given to you in advance in order for you to have time to read them carefully and take your decision about participation. Before starting the questionnaire completion, the adolescents will be asked to return the consent forms. You are free to withdraw at any time, without giving a reason. However, please be aware that data in summary form may already have been used for publication at the time of request.

You will be asked to complete the questionnaires at a specific time, date, and a classroom in the school as agreed by his/her head of school and in the presence of his/her teacher. I will administer the questionnaires to you, and I will be present to provide assistance if needed and to ensure confidential and independent responding. I have been Criminal Records Bureau (CRB) checked. It is important to remember that you are free to withdraw at any time, without giving a reason.

All data relating to your participation in this study will be held and processed in the strictest confidence, in accordance with the Data Protection Act (1998). No one outside of the research team will have access to any of the data and anonymity will be protected at all times.

If you are happy for you to participate in our study, I would be most grateful if you could please kindly complete and return the consent letters attached.

If you have any questions, please feel free to contact me by telephone on +44 7515255507 / +357 99 310707 or by email at C. Demetriou@roehampton.ac.uk.

Yours faithfully,

Constantina Demetriou

Department of Psychology,

Roehampton University,

Whitelands College,

Holybourne Avenue,

London, SW15 4JD

P.S. Please find below some examples of questions that will be used in this project. Please be aware that some of the questions may be sensitive for your child. However, the participation of your child is voluntary.

1. Compared to others of your age, how well (worse, same, better) do you:

a. Get along with your brothers & sisters?

b. Get along with other children?

c. Behave with your parents?

d. Do things by yourself?

2. I worry about things

□ Never □ Sometimes

□ Often □ Always

3. I am afraid of being in small closed places, like tunnels or small rooms

□ Never □ Sometimes

□ Often □ Always

4. I feel unhappy, sad and depressed

□ Not True □ Somewhat True □ Certainly True

5.There are strict consequences for breaking the rules in our family.

1	2	3	4	5
Strongly Disagree	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**

6.Family members feel guilty if they want to spend time away from the family.

1	2	3	4	5
Strongly Disagree	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**

7.Family members feel closer to people outside the family than to other family members.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

8.Family members try to understand each other's feelings.

1	2	3	4	5
Strongly Disagree	Generally Disagree	Undecided	Generally Agree	Strongly Agree

9.Your family's ability to resolve conflict.

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Generally Satisfied	Very Satisfied	Extremely Satisfied

10.Your family's ability to cope with stress.

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Generally Satisfied	Very Satisfied	Extremely Satisfied

Appendix VIII: Consent Form for Adolescents from Community Setting (Study 1)

Participant ID number: …..

Roehampton University London

ETHICS BOARD

PARTICIPANT CONSENT FORM

(ADOLESCENT CONSENT)

Title of Research Project:

Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Brief Description of Research Project:

The aims of this study are:

- Determine the incident of childhood and adolescent health and wellbeing in community and clinical setting.
- Compare specific family factors, such as family attachment, family functioning, family structure, parental styles, behaviours and beliefs, in children and adolescents from clinical and school settings.

For this purpose, you will be asked to complete a set of questionnaires, which will take a total of about 30 minutes to complete. Please note that the questionnaires used in this study will be completed anonymously, which means that your name will not be requested. Anonymity will be protected as far as possible, but please be aware that due to the longitudinal nature of the study, a database will be kept which will allow participant number to be linked with participant contact details. This database as well as the questionnaires and interview data will be kept confidential and only be used for research purposes. They will be accessible to the researcher only. Signed consent forms will be kept separate from all other data.

You have a right to withdraw from the study at any time. Should you wish to withdraw please quote the ID number provided on the Debrief Form so that the researcher will be able to identify his/her data. Please be aware, however, that data in summary form may already have been used for publication at the time of request.

Your participation in this study is voluntary.

Investigator Contact Details:

Name: Cnstantina Demetriou

University address: Department of Psychology, Roehampton University, Whitelands College, Holybourne, Avenue, London, SW154JD

Email: c.demetriou@roehampton.ac.uk

Telephone: +44 751 5255507, +357 99 310707

Consent Statement:

- I agree to take part in this study.
- I am also aware that I can withdraw from this study at any time without needing to justify the decision.
- I understand that all my personal data are held and processed in the strictest confidence, in accordance with the Data Protection Act (1998).
- I understand that the information which I provide will be treated in confidence by the researcher and that my identity will be protected in the publication of any findings.
- I have read the information contained within the letter of invitation,

YES ……. NO …….

I agree that the data will be stored in a secure location (in the office of the Director of Studies, Professor Cecilia Essau) and will be held for at least 10 years.

YES ……. NO …….

A copy of this consent form will be retained by the participant.

Name …….

Signature ……

Date ……

There is a second part to this study, and we would be grateful if you would let us contact you in a year's time to invite you to participate in the second study.

I would like to participate in the second study.

YES ……. NO …….

If **YES**, please remember your ID number above as you need to use the same ID for the second study.

Contact telephone number for Study2 …….

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the investigator. However if you would like to contact an independent party please contact the Head of Department or the Director of Studies or the external Cypriot supervisor.

Director of Studies Contact Details:

Name: Professor Cecilia Essau

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: c.essau@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3647

Head of Department Contact Details:

Name: Dr Danie Bray

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: d.bray@roehampton.ac.uk

Telephone: + 44 (0)20 8392 362

External Supervisor Contact Details:

Name: Dr Xenia Anastasiou - Hadjicharalambous

University Address: Department of Psychology, University of Nicosia, 46 Makedonitissas Avenue, Nicosia, 24005

Email: hadjicharalambous.x@unic.ac.uk

Telephone: + 357 22 351274 ext: 112

Appendix IX: Consent Form for Parents of Adolescents from Community Setting (Study 1)

Roehampton University London

Participant ID number: …..

ETHICS BOARD

PARTICIPANT CONSENT FORM

(PARENT/GUARDIAN CONSENT FOR THEIR CHILD'S PARTICIPATION)

Title of Research Project:

Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Brief Description of Research Project:

The aims of this study are:

- Determine the incident of childhood and adolescent health and wellbeing in community and clinical setting.
- Compare specific family factors, such as family attachment, family functioning, family structure, parental styles, behaviours and beliefs, in children and adolescents from clinical and school settings.

For this purpose, your child will be asked to complete a set of questionnaires, which will take a total of about 30 minutes to complete. Please note that the questionnaires used in this study, as well as the interview in Study 2, will be completed anonymously, which means that your child's name will not be requested. Anonymity will be protected as far as possible, but please be aware that due to the longitudinal nature of the study, a database will be kept which will allow participant number to be linked with participant contact details. This database as well as the questionnaires and interview data will be kept confidential and only be used for research purposes. They will be accessible to the researcher only. Signed consent forms will be kept separate from all other data.

Your child has a right to withdraw from the study at any time. Should your child wish to withdraw he/she needs to quote the ID number provided on the Debrief Form so that the researcher will be able to identify his/her data. You also have a right to withdraw your

child from the study at any time. Please be aware, however, that data in summary form may already have been used for publication at the time of request.

Your child's participation in this study is voluntary.

Investigator Contact Details:

Name: Costantina Demetriou

University address: Department of Psychology, Roehampton University, Whitelands College, Holybourne, Avenue, London, SW154JD

Email: c.demetriou@roehampton.ac.uk

Telephone: +44 751 5255507, +357 99 310707

Consent Statement:

- I agree for my child to take part in this study.
- I am also aware that my child can withdraw from this study at any time without needing to justify his/her decision.
- I understand that all my child's personal data will be held and processed in the strictest confidence, in accordance with the Data Protection Act (1998).
- I understand that the information which my child provides will be treated in confidence by the researcher and that my child's identity will be protected in the publication of any findings.
- I have read the information contained within the letter of invitation.

YES ……. NO …….

I agree that the data will be stored in a secure location (in the office of the Director of Studies, Professor Cecilia Essau) and will be held for at least 10 years.

YES ……. NO …….

A copy of this consent form will be retained by the participant.

Child's name …….

Relationship to the child …….

Parent/Guardian's Name …….

Signature ……

Date ……

There is a second part to this study, and we would be grateful if you would let us contact you and your child in a year's time to invite your child to participate in the second study.

I would like my child to participate in the second study.

YES ……. NO …….

If **YES**, please remember your ID number above as you need to use the same ID for the second study.

Contact telephone number for Study2 …….

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the investigator. However if you would like to contact an independent party please contact the Head of Department or the Director of Studies or the external Cypriot Supervisor.

Director of Studies Contact Details:

Name: Professor Cecilia Essau

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: c.essau@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3647

Head of Department Contact Details:

Name: Dr Diane Bray

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: d.bray@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3627

External Supervisor Contact Details:

Name: Dr Xenia Anastasiou - Hadjicharalambous

University Address: Department of Psychology, University of Nicosia, 46 Makedonitissas Avenue, Nicosia, 24005

Email: hadjicharalambous.x@unic.ac.uk

Telephone: + 357 22 351274 ext: 112

Appendix X: Debrief Form for Adolescents from both Community and Clinical Settings (Study 1 & Study 2)

Roehampton University London

Participant ID number: …..

ETHICS BOARD

PARTICIPANT DEBRIEF

(FOR ADOLESCENT)

Title of Research Project:

Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Brief Description of Research Project:

This study seeks to examine the health and wellbeing of children and adolescents in community and clinical settings and find out what things inside the family environment make them happy or unhappy.

The questionnaires you have just completed are used to assess: (i) health and wellbeing in clinical and community settings, (ii) family structure and functioning, (iii) what relationship and support people experience from their family members, (iv) major life events experienced within the past 12 months, and (v) your age, gender, etc, but not your name.

All data gathered during this study will be held securely and anonymously. If you wish to withdraw from the study, contact us with your participant number (above) and your information will be deleted from our files. Please be aware, however, that data in summary form may already have been used for publication at the time of request.

If you are troubled or worried about any aspect of the study, or issues it may have raised, or wish to speak in confidence about mental health needs, please feel free to contact any of the following agencies:

- **Social Welfare Services of the Ministry of Labour and Social Insurance**
  www.central.sws@sws.misi.gov.cy

  Tel: 00357 22 40 67 09

This service has a specific unit for family and children which aims to support the Family unit in order to enable family members to effectively perform their roles and responsibilities; to resolve family disputes that threaten the unity of family; to safeguard the protection and welfare of children.

- **Family Violence Services and Support**
  www.familyviolence.gov.cy

  Tel: 00357 22 77 58 88

  This committee focuses on any form of violence that children and adolescents experience with their family.

- **Childline**
  www.preventionsection.org.cy

  Tel: 1410

  This helpline is open Monday to Friday from 10 a.m. to 24 p.m. and from 15 p.m. to 24 p.m. during the weekends. Childline is free of charge in Cyprus and it can help you if you feel distress or anxious and you would like some support.

Should you have a concern about any aspect of your participation in this study, please raise this with me:

Investigator Contact Details:

Name: Constantina Demetriou

University address: Department of Psychology, Roehampton University, Whitelands College, Holybourne, Avenue, London, SW154JD

Email: c.demetriou@roehampton.ac.uk

Telephone: +44 751 5255507, +357 99 310707

Director of Studies Contact Details:

Name: Professor Cecilia Essau

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: c.essau@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3647

External Supervisor Contact Details:

Name: Dr Xenia Anastasiou - Hadjicharalambous

University Address: Department of Psychology, University of Nicosia, 46 Makedonitissas Avenue, Nicosia, 24005

Email: hadjicharalambous.x@unic.ac.uk

Telephone: + 357 22 351274 ext: 112

Alternatively, you may like to take up your concerns with the Head of Department:

Head of Department Contact Details:

Name: Dr Diane Bray

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: d.bray@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3627

Thank you once again for your participation,

Constantina Demetriou

Appendix XI: Consent Form for Adolescents from Clinical Setting (Study 2)

Consent Form For your participation in a research (The document contains 4 pages)

You are asked to participate in a research program. Below (see "Information for patients and/or Volunteers"), you will be given an explanation about what will be required from you and what will happen to you, if you agree to participate in the program. Researcher will describe any risks there may be. You will be explained in detail what will be requested and who will have access to the information that you will provide. You will be given the time period of which your information will be kept safety. The purpose of this research will be explained to you. In addition, at the end of your participation, you will be given a debrief form, in which information about the benefits of this research program.

We must not join, if you do not want or if you have any second thoughts. If you do decide to join, you must please indicate if you participate in any other program of research into the last 12 months. If you are a patient and you decide not to participate, please note that your treatment will not be affected by your decision. You are free to withdraw at any time you wish to. If you are patient, your decision to withdraw your consent will not have any impact on your treatment. You have the right to submit any complaints in relation to the program in which you participate, to the Cyprus National Bioethics Committee.

You have to sign all the pages of this consent form

Tittle of the research program
Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.
Researcher
Constantina Demetriou

Surname:	.....	Name:	.....
Signature:		Date:	

Aims of this research program:

- Determine the incident of childhood and adolescent health and wellbeing in community and clinical setting.
- Compare specific family factors, such as family attachment, family functioning, family structure, parental styles, behaviours and beliefs, in children and adolescents from clinical and school settings.

For this purpose, you will be asked to complete a set of questionnaires, which will take a total of about 30 minutes to complete. Please note that the questionnaires used in this study will be completed anonymously, which means that your name will not be requested. Anonymity will be protected as far as possible, but please be aware that due to the longitudinal nature of the study, a database will be kept which will allow participant number to be linked with participant contact details. This database as well as the questionnaires and interview data will be kept confidential and only be used for research purposes. They will be accessible to the researcher only. Signed consent forms will be kept separate from all other data.

You have a right to withdraw from the study at any time. Should you wish to withdraw please quote the ID number provided on the Debrief Form so that the researcher will be able to identify his/her data. Please be aware, however, that data in summary form may already have been used for publication at the time of request.

Your participation in this study is voluntary.

If you have any queries please contact me on +357 99 310707 or email me at c.demetriou@roehampton.ac.uk.

Surname:	.....	Name:	.....
Signature:		Date:	

Consent Form For your participation in a research (The document contains 4 pages)
Tittle of research program
Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Are you giving your consent for you or for someone else	
If you are giving your consent for someone else, please specify	

Questions	Yes or No
Did you complete the consent form on your own?	
Did you participate in any other research programs the last 12 months?	
Did you read and understand the information provided?	
Did you have the opportunity to ask questions about the research program?	
Did you receive accurate answers?	
Are you aware that you can withdraw from this study at any time?	
Are you aware that you can withdraw from this study at any time without needing to justify the decision?	
(For patients) Is it clear that if you decide to withrdaw, there will be no consequences?	
Do you agree to store the data in a secure location (in the office of the Director of Studies, Professor Cecilia Essau) and held them at least 10 years?	
Do you agree to take part in this research programme	

Surname:	.....	Name:	.....
Signature:		Date:	

Consent Form

For your participation in a research

(The document contains 4 pages)

Tittle of research program

Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Extra information

There is a second part to this study, and we would be grateful if you would let us contact you in a year's time to invite you to participate in the second study.

I would like to participate in the second study.

YES ……. NO …….

If **YES**, please remember your ID number above as you need to use the same ID for the second study.

Contact telephone number for Study2 …….

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the investigator. However if you would like to contact an independent party please contact the Head of Department or the Director of Studies or the external Cypriot supervisor.

External Supervisor Contact Details:

Name: Dr Xenia Anastasiou - Hadjicharalambous

University Address: Department of Psychology, University of Nicosia, 46 Makedonitissas Avenue, Nicosia, 24005

Email: hadjicharalambous.x@unic.ac.uk

Telephone: + 357 22 351274 ext: 112

Director of Studies Contact Details:

Name: Professor Cecilia Essau

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: c.essau@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3647

Head of Department Contact Details:

Name: Dr Danie Bray

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: d.bray@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3627

Surname:	.....	Name:	.....
Signature:		Date:	

Appendix XII: Consent Form for Parents of Adolescents from Clinical Setting (Study 2)

Consent Form For your participation in a research (The document contains 5 pages)

You are asked to participate in a research program. Below (see "Information for patients and/or Volunteers"), you will be given an explanation about what will be required from you and what will happen to you, if you agree to participate in the program. Researcher will describe any risks there may be. You will be explained in detail what will be requested and who will have access to the information that you will provide. You will be given the time period of which your information will be kept safety. The purpose of this research will be explained to you. In addition, at the end of your participation, you will be given a debrief form, in which information about the benefits of this research program.

We must not join, if you do not want or if you have any second thoughts. If you do decide to join, you must please indicate if you participate in any other program of research into the last 12 months. If you are a patient and you decide not to participate, please note that your treatment will not be affected by your decision. You are free to withdraw at any time you wish to. If you are patient, your decision to withdraw your consent will not have any impact on your treatment. You have the right to submit any complaints in relation to the program in which you participate, to the Cyprus National Bioethics Committee.

You have to sign all the pages of this consent form

Tittle of the research program
Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.
Researcher
Constantina Demetriou

Surname:	.....	Name:	.....
Signature:		Date:	

Dear Parent/Guardian,

I am a researcher based in the Department of Psychology, Roehampton University in London. I am conducting a large project in Cyprus, which aims to examine the predictors of health and wellbeing of children and adolescents in community and clinical settings under the supervision of Professor Cecilia Essau.

Adolescents aged 13 to 16 years old will be asked to complete a set of questionnaires, which will take a total of about 30 minutes to complete. These questionnaires will be used to assess: (i) health and wellbeing, (ii) normal variation in aspects of mood and personality, (iii) family structure and functioning, (iv) what relationship and support people experience from their family members, (v) major life events experienced within the past 12 months, and (vi) their age, gender, etc. For these purposes, the questionnaires contain questions related to behavioural, emotional and physical problems of the child, fears, anxieties, traumatic events that may have occurred in the child's life and any post-traumatic symptoms. There will also be questions about the ability to concentrate, social relationships with peers, relationships with parents and their pubertal status. These questions will help to analyse how family influences child's well-being as well as social, cognitive and developmental functioning. It is important to clarify that the questionnaires are not designed to diagnose mental illness.

The questionnaires will be completed anonymously. Anonymity will be protected as far as possible, but please be aware that due to the longitudinal nature of the study, a database will be kept which will allow participant number to be linked with participant contact details. The completed questionnaires will be kept confidential and only be used for research purposes. They will be accessible to the researcher only. Only adolescents who have written and signed consent forms to participate in the present study from you will be allowed to take part in the study. These forms will be given to them in advance in order for you to have time to read them carefully and take your decision about allowing your child to participate. Before starting the questionnaire completion, the adolescents will be asked to return the consent forms. The adolescents are free to withdraw at any time, without giving a reason. However, they will be aware that data in summary form may already have been used for publication at the time of request.

Your child will be asked to complete the questionnaires at a specific daytime, date, and a room in the pediatric unit as agreed by his/her director of unit, and in the presence of a staff member. I will administer the questionnaires to the adolescents, and I will be present to provide assistance if needed and to ensure confidential and independent responding. I have been Criminal Records Bureau (CRB) checked. It is important to remember that your child is free to withdraw at any time, without giving a reason.

All data relating to your child's participation in this study will be held and processed in the strictest confidence, in accordance with the Data Protection Act (1998). No one outside of the research team will have access to any of the data and anonymity will be protected at all times.

If you are happy for your child to participate in our study, I would be most grateful if you could please kindly complete and return the consent letters attached.

If you have any questions, please feel free to contact me by telephone on +44 7515255507 / +357 99 310707 or by email at C. Demetriou@roehampton.ac.uk.

Yours faithfully,

Constantina Demetriou

Surname:	.....	Name:	.....
Signature:		Date:	

Consent Form For your participation in a research (The document contains 5 pages)
Tittle of research program
Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Are you giving your consent for you or for someone else	
If you are giving your consent for someone else, please specify	

Questions	Yes or No
Did you complete the consent form on your own?	
Did you participate in any other research programs the last 12 months?	
Did you read and understand the information provided?	
Did you have the opportunity to ask questions about the research?	
Did you receive accurate answers?	
Are you aware that your child can withdraw from this study at any time?	
Are you aware that your child can withdraw from this study at any time without needing to justify the decision?	
(For patients) Is it clear that if your child's decide to withdraw, there will be no consequences?	
Do you agree to store the data in a secure location (in the office of the Director of Studies, Professor Cecilia Essau) and held them at least 10 years?	
Do you agree for your child to take part in this research program?	

Surname:	.....	Name:	.....
Signature:		Date:	

Consent Form

For your participation in a research

(The document contains 5 pages)

Tittle of research program

Health of young people in Cyprus. The influence of family on health and well being among children and adolescents in community and clinical settings.

Extra information

There is a second part to this study, and we would be grateful if you would let us contact you and your child in a year's time to invite your child to participate in the second study.

I would like my child to participate in the second study.

YES ……. NO …….

If **YES**, please remember your ID number above as you need to use the same ID for the second study.

Contact telephone number for Study2 …….

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the investigator. However if you would like to contact an independent party please contact the Head of Department or the Director of Studies or the external Cypriot supervisor.

External Supervisor Contact Details:

Name: Dr Xenia Anastasiou - Hadjicharalambous

University Address: Department of Psychology, University of Nicosia, 46 Makedonitissas Avenue, Nicosia, 24005

Email: hadjicharalambous.x@unic.ac.uk

Telephone: + 357 22 351274 ext: 112

Director of Studies Contact Details:

Name: Professor Cecilia Essau

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: c.essau@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3647

Head of Department Contact Details:

Name: Dr Danie Bray

University Address: Department of Psychology, Roehampton University, Whitelands College, Holybourne Avenue, London, SW15 4JD

Email: d.bray@roehampton.ac.uk

Telephone: + 44 (0)20 8392 3627

Surname:	.....	Name:	.....
Signature:		Date:	

Appendix XIII: Instruments

XIII.1 Demographic Information for Adolescents from Community Setting (Study 1)

Demographics

Please answer or encirclement of the following questions

1. Gender: Female / Male

2. Age : _____ (years)

3. **At this stage** you live with:

❒ Biological mother and Biological Father ❒ Biological Father and Guardian

❒ Biological mother and Guardian ❒ Grandfather and Grandmother

❒ Orphanage ❒ Adoptive parents

❒ One parent (Father) ❒ One parent (Mother)

❒ Other, please specify: _____

4. How many members your family has : _____

5. Are you the only child? ❒ YES ❒ NO

If **not**, which children in the series you are: (e.g. firstbirth, secondbirth)
_____

6. Your Religion: _____

(e.g. Christian Orthodox, Christian Catholic, Muslim)

7. Your nationality: _____

(e.g. Greek Cypriot, Turkish Cypriot, Armenian, Maronite, Latin)

8. Your home are today: (Please **specify** – e.g. Nicosia, Latsia, Paralimni, Παραλίμνι, Refugee camps Anthoupolis)

_____

9. Your parents job: (Please **specify the exact nature** of the profession - eg, business managers, home, teacher, teacher, maid)

a. Father's Job: _____

b. Mother's Job: _____

10. Education of parents / guardians:

Father:		**Mother:**
Graduate Elementary School		Graduate Elementary School
Graduate Secondary/High School		Graduate Secondary/High School
Graduate College/University		Graduate College/University
Post-graduate Studies (Master's degree)		Post-graduate Studies (Master's degree)
Doctorate (PhD)		Doctorate (PhD)
No education		No education
Other (please specify): _____		Other (please specify): _____

11. I have serious problems occurred in the last 12 months:

❒YES ❒NO

IF YES,

- what happened: _____

-who had involvement: _____

-how you deal with it: _____

-how stressful this event was: _____

-Does anyone helped you? _____

- If yes, who? _____

12. To be able to encode your questionnaire with possible involvement of you in our next survey that will take place approximately after a year, please fill in:

Your **first letter of your name** with your **last 4 digits of your landline**:
_____

13. Date (today):_____

XIII.2 Demographic Information for Adolescents from Clinical Setting (Study 2)

Demographics

Please answer or encirclement of the following questions

1. Gender: Female / Male

2. Age : _____ (years)

3. **At this stage** you live with:

❒ Biological mother and Biological Father ❒ Biological Father and Guardian

❒ Biological mother and Guardian ❒ Grandfather and Grandmother

❒ Orphanage ❒ Adoptive parents

❒ One parent (Father) ❒ One parent (Mother)

❒ Other, please specify: _____

4. How many members your family has : _____

5. Are you the only child? ❒ YES ❒ NO

If **not**, which children in the series you are: (e.g. first birth, second birth)
_____

6. Your Religion: _____

(e.g. Christian Orthodox, Christian Catholic, Muslim)

7. Your nationality: _____

(e.g. Greek Cypriot, Turkish Cypriot, Armenian, Maronite, Latin)

8. Your home are today: (Please **specify** – e.g. Nicosia, Latsia, Paralimni, Παραλίμνι, Refugee camps Anthoupolis)

_____

9. Your parents job: (Please **specify the exact nature** of the profession - eg, business managers, home, teacher, teacher, maid)

a. Father's Job: _____

b. Mother's Job: _____

10. Education of parents / guardians:

Father:		**Mother:**
Graduate Elementary School		Graduate Elementary School
Graduate Secondary/High School		Graduate Secondary/High School
Graduate College/University		Graduate College/University
Post-graduate Studies (Master's degree)		Post-graduate Studies (Master's degree)
Doctorate (PhD)		Doctorate (PhD)
No education		No education
Other (please specify): _____		Other (please specify): _____

11. Monthly Family income:

❒ Less than €850 ❒ €851-€1700

❒ €1701-€3400 ❒ €3401-€5000

❒ €5001-€6000 ❒ €6001-€7500
❒ €7501-€9000 ❒ more than €9001

❒ Other (Please specify) _____

12. I have serious problems occurred in the last 12 months:

❒YES ❒NO

IF YES,

- what happened: _____

-who had involvement: _____

-how you deal with it: _____

-how stressful this event was: _____

-Does anyone helped you? _____

- If yes, who? _____

13. To be able to encode your questionnaire with possible involvement of you in our next survey that will take place approximately after a year, please fill in:

Your **first letter of your name** with your **last 4 digits of your landline**:
_____

14. Date (today):_____

XIII.3 Youth Self-Report

Below it is a list with elements of behavior. For the completion of this scale, you take into consideration you your behavior **in the present or in the last 6 months**.

I. Please list the sports you most like to take part in. For example: swimming, baseball, skating, skate boarding, bike riding, fishing, etc.

How much times the week you dedicate in each one:

❒ None	None	1 time	2 to 3 times	More than 4 times	Don't know
α. _____	❒	❒	❒	❒	❒
β. _____	❒	❒	❒	❒	❒
γ. _____	❒	❒	❒	❒	❒

II. Please list any organizations, clubs, teams or groups you belong to.

How many actively you participate in each one?

❒ None	Less Active	Avarage	More Active
α. _____	❒	❒	❒
β. _____	❒	❒	❒
γ. _____	❒	❒	❒

III. 1. About how many close friends do you have? (Do not include brothers & sisters)

❒ None ❒ 1 ❒ 2-3 ❒ 4 or more

2. About how many times a week do you do things with any friends outside of regular school hours? (Do not include brothers & sisters)

❒ Less than 1 ❒ 1 or 2 ❒ 3 or more

VII. 1. Performance in academic subjects. **❒ I do not attend school because** _____

How good student you thing you are	Failing	Below Average	Average	Above Average

2. Do you have any illness, disability or handlcap? **❒ NAI** **❒ OXI**

α. If **YES**, please describe ……

Please circle your answer. For each item that describes you **now or within the past 6 months,** please circle the **2** if the item is **very true or often true** of you. Circle the **1** if the item is **somewhat or sometimes true** of you. If the item is **not true** of you, circle **0**.

0 = Not True **1 = Somewhat or Sometimes True** **2 = Very True or Often True**

1. I act too young for my age	**0**	**1**	**2**	20. I destroy my own things	**0**	**1**	**2**
2. I drink alcohol without my parents' approval (describe) _____	**0**	**1**	**2**	21. I destroy things belonging to others	**0**	**1**	**2**
3. I argue a lot	**0**	**1**	**2**	22. I disobey at school	**0**	**1**	**2**
4. I fail to finish things that I start	**0**	**1**	**2**	23. I disobey my parents	**0**	**1**	**2**
5. There is very little that I enjoy	**0**	**1**	**2**	24. I don't eat as well as I should	**0**	**1**	**2**
6. I like animals	**0**	**1**	**2**	25. I don't get along with other kids	**0**	**1**	**2**
7. I brag	**0**	**1**	**2**	26. I don't feel guilty after doing something I shouldn't	**0**	**1**	**2**
8. I have trouble concentrating or playing attention	**0**	**1**	**2**	27. I jealous of others	**0**	**1**	**2**
9. I can't get my mind off certain thoughts (describe): _____	**0**	**1**	**2**	28. I break rules at home, school or elsewhere	**0**	**1**	**2**
10. I have trouble sitting still.	**0**	**1**	**2**	29. I am afraid of certain animals, situations, or places, other than school (describe): _____	**0**	**1**	**2**
11. I'm too dependent on adults	**0**	**1**	**2**	30. I am afraid of going to school	**0**	**1**	**2**
12. I feel lonely	**0**	**1**	**2**	31. I am afraid I might think or do something bad	**0**	**1**	**2**
13. I feel confused or in a fog	**0**	**1**	**2**	32. I feel that I have to be perfect	**0**	**1**	**2**
14. I cry a lot	**0**	**1**	**2**	33. I feel that no one loves me	**0**	**1**	**2**
15. I am pretty honest	**0**	**1**	**2**	34. I feel that others are out to get me	**0**	**1**	**2**

16. I am mean to others	**0**	**1**	**2**	35. I feel worthless or inferior	**0**	**1**	**2**
17. I daydream a lot	**0**	**1**	**2**	36. I accidentally get hurt a lot	**0**	**1**	**2**
18. I deliberately try to hurt or kill myself	**0**	**1**	**2**	37. I get in many fights	**0**	**1**	**2**
19. I try to get a lot attention	**0**	**1**	**2**	38. I get teased a lot	**0**	**1**	**2**
39. I hang around with kids who get in trouble	**0**	**1**	**2**	c. Nausea, feel sick	**0**	**1**	**2**
40. I hear sounds or voices that other people think aren't there (describe): _____	**0**	**1**	**2**	d. Problems with eyes (**not** if corrected by glasses (describe): _____	**0**	**1**	**2**
41. I act without stopping to think	**0**	**1**	**2**	e. Rashes or other skin problems	**0**	**1**	**2**
42. I would rather be alone than with others	**0**	**1**	**2**	f. Stomachaches	**0**	**1**	**2**
43. I lie or cheat	**0**	**1**	**2**	g. Vomiting, throwing up	**0**	**1**	**2**
44. I bite my fingernails	**0**	**1**	**2**	h. Other (describe):_____	**0**	**1**	**2**
45. I am nervous or tense	**0**	**1**	**2**	57. I physically attack people	**0**	**1**	**2**
46. Parts of my body twitch or make nervous movements (describe): _____	**0**	**1**	**2**	58. I pick my skin or other parts of my body (describe): _____	**0**	**1**	**2**
47. I have nightmares	**0**	**1**	**2**	59. I can be pretty friendly	**0**	**1**	**2**
48. I am not liked by other kids	**0**	**1**	**2**	60. I like to try nw things	**0**	**1**	**2**
49. I can do certain things better than most kids	**0**	**1**	**2**	61. My school wotk is poor	**0**	**1**	**2**
50. I too fearful or anxious	**0**	**1**	**2**	62. I am poorly coordinated or clumsy	**0**	**1**	**2**
51. I feel dizzy or lightheaded	**0**	**1**	**2**	63. I would rather be with older kinds than kinds my own age	**0**	**1**	**2**
52. I feel too guilty	**0**	**1**	**2**	64. I would rather be with younger kids than kinds my own age	**0**	**1**	**2**
53. I eat too much	**0**	**1**	**2**	65. I refuse to talk	**0**	**1**	**2**

54. I feel overtired without good reason	**0**	**1**	**2**	66. I repeat certain acts over and over (describe): _____ _____	**0**	**1**	**2**
55. I am overweight	**0**	**1**	**2**	67. I run away from home	**0**	**1**	**2**
56. Physical problems **without known medical cause**:	**0**	**1**	**2**	68. I scream a lot	**0**	**1**	**2**
a. Aches or pains (**not** stomach or headaches)	**0**	**1**	**2**	69. I am secretive or keep things to myself	**0**	**1**	**2**
b. Headaches	**0**	**1**	**2**	70. I see things that other people think aren't there (describe): _____	**0**	**1**	**2**
71. I am self-conscious or easily embarrassed	**0**	**1**	**2**	90. I swear or use dirty language	**0**	**1**	**2**
72. I set fires	**0**	**1**	**2**	91. I think about killing myself	**0**	**1**	**2**
73. I can work well with my hands	**0**	**1**	**2**	92. I like to make others laugh	**0**	**1**	**2**
74. I show off or clown	**0**	**1**	**2**	93.I talk too much	**0**	**1**	**2**
75. I am too shy or timid	**0**	**1**	**2**	94.I tease other a lot	**0**	**1**	**2**
76. I sleep less than most kids	**0**	**1**	**2**	95.I have a hot temper	**0**	**1**	**2**
77. I sleep more than most kids during day and/or night (describe): _____ _____ _____	**0**	**1**	**2**	96.I think about sex too much	**0**	**1**	**2**
78. I am inattentive or easily distracted	**0**	**1**	**2**	97.I threaten to hurt people	**0**	**1**	**2**
79. I have a speech problem (describe): _____ ___	**0**	**1**	**2**	98.I like to help others	**0**	**1**	**2**
80.I stand up for my rights	**0**	**1**	**2**	99.I smoke, chew, or sniff tobacco	**0**	**1**	**2**
81. I steal at home	**0**	**1**	**2**	100.I have trouble sleeping (describe): _____	**0**	**1**	**2**

				___			
82. I steal from places other than home	**0**	**1**	**2**	101. I cut classes or skip school	**0**	**1**	**2**
83. I store up too many things I don't need (describe): _____	**0**	**1**	**2**	102. I don't have much energy	**0**	**1**	**2**
84. I do things other people think are strange (describe): _____	**0**	**1**	**2**	103. I am unhappy, sad or depressed	**0**	**1**	**2**
85.I have thoughts that other people would think are strange (describe): _____	**0**	**1**	**2**	104. I am louder than other kids	**0**	**1**	**2**
86.I am stubborn	**0**	**1**	**2**	105. I use drugs for nonmedical purposes (**don't** include alcohol or tobacco) (describe): _____ _____	**0**	**1**	**2**
87. My moods or feelings change suddenly	**0**	**1**	**2**	106. I like to be fair to others	**0**	**1**	**2**
88. I enjoy being with people	**0**	**1**	**2**	107. I enjoy a good joke	**0**	**1**	**2**
89. I am suspicious	**0**	**1**	**2**	108. I like to take life easily	**0**	**1**	**2**
109. I try to help other people when I can	**0**	**1**	**2**	111. I keep from getting involved with others	**0**	**1**	**2**
110. I wish I were of the opposite sex	**0**	**1**	**2**	112. I worry a lot	**0**	**1**	**2**

113. Please write down anything else that describes your feelings, behavior, or interests:

.....

.....

.....

XIII.4 Strengths and Difficulties Questionnaire

For each item, please mark the box for **Not True**, **Somewhat True** or **Certainly True**. It would help us if you answered **all items** as better as you can **ever if you are not absolutely certain** or the item seems daft!

Please give your answers on the basis of how things have been for you **over the last six months**.

		Not True	Somewhat True	Certainly True
1	I try ro be nice to other people. I care about their feelings.	❒	❒	❒
2	I am restless, I cannot say still for long.	❒	❒	❒
3	I get a lot of headaches, stomach-aches or sickness.	❒	❒	❒
4	I usually share with others (food, games, pens, etc.)	❒	❒	❒
5	I get very angry and often lose my temper	❒	❒	❒
6	I am usually on my own. I generally play alone or keep to myself.	❒	❒	❒
7	I usually do as I am told.	❒	❒	❒
8	I worry a lot.	❒	❒	❒
9	I am helpful if someone is hurt, upset or feeling ill.	❒	❒	❒
10	I am constantly fidgeting or squirming.	❒	❒	❒
11	I have one good friend or more.	❒	❒	❒
12	I fight a lot. I can make other people do what I want.	❒	❒	❒
13	I am often unhappy, down-hearted or tearful.	❒	❒	❒
14	Often people my age generally like me.	❒	❒	❒
15	I am easily distracted, I find it difficult to concentrate.	❒	❒	❒
16	I am nervous in new situations. I easily lose confidence	❒	❒	❒
17	I am kind to younger children.	❒	❒	❒
18	I am often accused of lying or cheating.	❒	❒	❒
19	Other children or young people pick me or bully me.	❒	❒	❒
20	I often volunteer to help others (parents, teachers, children).	❒	❒	❒
21	I think before I do things.	❒	❒	❒
22	I take things that are not mine from home,	❒	❒	❒

	school or elsewhere.			
23	I get on better with adults than with people my own age.	❒	❒	❒
24	I have many fears, I am easily scared.	❒	❒	❒
25	I finish the work I'm doing. My attention is good.	❒	❒	❒

Overall, do you think that you have difficulties in one or more of the following areas:

Emotions, concentration, behavior or being able to get on with other people?

❒ NO **❒ YES** **Minor Difficulties** **❒ YES** **Definite Difficulties** **❒ YES** **Severe Difficulties**

If you have answered «**YES**» **,** please answer the following questions about these difficulties:

- How long have these difficulties been present?

  ❒ Less than a month **❒ 1-5 months** **❒ 6-12 months** **❒ Over a year**

- Do the difficulties upset or distress you?

  ❒ Not at all **❒ Only a little** **❒ Quite a lot** **❒ A great deal**

- Οι δυσκολίες αποτελούν εμπόδιο στη καθημερινή ζωή στις παρακάτω περιοχές;

	Not at all	**Only a little**	**Quite a lot**	**A great deal**
HOME LIFE	❒	❒	❒	❒
FRIENDSHIP	❒	❒	❒	❒
CLASSROOM LEARNING	❒	❒	❒	❒
LEISURE ACTIVITIES	❒	❒	❒	❒

- Do the difficulties make it harder for those around you (family, friends, teachers, etc) ?

  ❒ Not at all **❒ Only a little** **❒ Quite a lot** **❒ A great deal**

XIII.5 Spence Children's Anxiety Scale

Please **circle** the word that shows **how often** each of these events happening to you. There is no right or wrong answer.

1	I worry about things	**Never**	**Sometimes**	**Often**	**Always**
2	I am scared of the dark	**Never**	**Sometimes**	**Often**	**Always**
3	When I have a problem, I get a funny feeling in my stomach	**Never**	**Sometimes**	**Often**	**Always**
4	I feel afraid	**Never**	**Sometimes**	**Often**	**Always**
5	I would feel afraid of being on my own at home	**Never**	**Sometimes**	**Often**	**Always**
6	I feel scared when I have to take a test	**Never**	**Sometimes**	**Often**	**Always**
7	I feel afraid if I have to use public toilets or bathrooms	**Never**	**Sometimes**	**Often**	**Always**
8	I worry about being away from my parents	**Never**	**Sometimes**	**Often**	**Always**
9	I feel afraid that I will make a fool of myself in front of people	**Never**	**Sometimes**	**Often**	**Always**
10	I worry that I will do badly at my school work	**Never**	**Sometimes**	**Often**	**Always**
11	I am popular amongst other kids my own age	**Never**	**Sometimes**	**Often**	**Always**
12	I worry that something awful will happen to someone in my family	**Never**	**Sometimes**	**Often**	**Always**
13	I suddenly feel as if I can't breathe when there is no reason for this	**Never**	**Sometimes**	**Often**	**Always**
14	I feel scared if I have to sleep on my own	**Never**	**Sometimes**	**Often**	**Always**
15	I have trouble going to school in the mornings because I feel nervous or afraid	**Never**	**Sometimes**	**Often**	**Always**
16	I have trouble going to school in the mornings because I feel nervous or afraid	**Never**	**Sometimes**	**Often**	**Always**
17	I am good at sports	**Never**	**Sometimes**	**Often**	**Always**
18	I am scared of dogs	**Never**	**Sometimes**	**Often**	**Always**
19	I can't seem to get bad or silly thoughts out of my head	**Never**	**Sometimes**	**Often**	**Always**
20	When I have a problem, my heart beats really fast	**Never**	**Sometimes**	**Often**	**Always**
21	I suddenly start to tremble or shake when there is no reason for this	**Never**	**Sometimes**	**Often**	**Always**
22	I worry that something bad will happen to me	**Never**	**Sometimes**	**Often**	**Always**
23	I am scared of going to the doctors or dentists	**Never**	**Sometimes**	**Often**	**Always**
24	When I have a problem, I feel shaky	**Never**	**Sometimes**	**Often**	**Always**
25	I am scared of being in high places or elevators	**Never**	**Sometimes**	**Often**	**Always**

26	I am a good person	**Never**	**Sometimes**	**Often**	**Always**
27	I have to think of special thoughts (like numbers or words) to stop bad things from happening	**Never**	**Sometimes**	**Often**	**Always**
28	I feel scared if I have to travel in the car, or on a bus or a train	**Never**	**Sometimes**	**Often**	**Always**
29	I worry what other people think of me	**Never**	**Sometimes**	**Often**	**Always**
30	I am afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds)	**Never**	**Sometimes**	**Often**	**Always**
31	I feel happy	**Never**	**Sometimes**	**Often**	**Always**
32	All of a sudden I feel really scared for no reason at all	**Never**	**Sometimes**	**Often**	**Always**
33	I am scared of insects or spiders	**Never**	**Sometimes**	**Often**	**Always**
34	I suddenly become dizzy or faint when there is no reason for this	**Never**	**Sometimes**	**Often**	**Always**
35	I feel afraid if I have to talk in front of my class	**Never**	**Sometimes**	**Often**	**Always**
36	My heart suddenly starts to beat too quickly for no reason	**Never**	**Sometimes**	**Often**	**Always**
37	I worry that I will suddenly get a scared feeling when there is nothing to be afraid of	**Never**	**Sometimes**	**Often**	**Always**
38	I like myself	**Never**	**Sometimes**	**Often**	**Always**
39	I am afraid of being in small closed places, like tunnels or small rooms	**Never**	**Sometimes**	**Often**	**Always**
40	I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order)	**Never**	**Sometimes**	**Often**	**Always**
41	I get bothered by bad or silly thoughts or pictures in my mind	**Never**	**Sometimes**	**Often**	**Always**
42	I have to do some things in just the right way to stop bad things happening	**Never**	**Sometimes**	**Often**	**Always**
43	I am proud of my school work	**Never**	**Sometimes**	**Often**	**Always**
44	I would feel scared if I had to stay away from home overnight	**Never**	**Sometimes**	**Often**	**Always**
45	Is there something else that you are really afraid of? Please write down what it is _____	**YES**		**NO**	
46	How often are you afraid of this thing?	**Never**	**Sometimes**	**Often**	**Always**

47	Have you experience or witnessed an event in which you felt very afraid, horrified or helpless, in which you or someone else was in danger of death, serious injury or threat?	**YES**	**NO**

If you answered YES to this question:

What was the event? _____

Approximately what date and year did the event occur?

_____

Only answer the following questions if you answer YES to the question above. Do you experience the following:

47a	I have dreams or nightmares about this event	**Never**	**Sometimes**	**Often**	**Always**
47 b	Thoughts, pictures or memories about the event keep coming into my mind	**Never**	**Sometimes**	**Often**	**Always**
47c	When I remember the event I feel upset or afraid all over again	**Never**	**Sometimes**	**Often**	**Always**
47 d	I get flashbacks or daydreams in which it feels like it is happening all over again	**Never**	**Sometimes**	**Often**	**Always**
47e	I avoid places, people or activities which remind me of the event	**Never**	**Sometimes**	**Often**	**Always**
47f	I deliberately try not to think or talk about the stressful event	**Never**	**Sometimes**	**Often**	**Always**
47g	Since the event i find it hard to sleep	**Never**	**Sometimes**	**Often**	**Always**
47 h	Since the event I am very irritable or get angry more easily	**Never**	**Sometimes**	**Often**	**Always**
47i	I find it difficult to remember details of exactly what happened	**Never**	**Sometimes**	**Often**	**Always**
47j	Since the event happened, my emotions feel numb	**Never**	**Sometimes**	**Often**	**Always**
47k	Since the event i feel more on edge and easily startled	**Never**	**Sometimes**	**Often**	**Always**
47l	Since the event I am on the look out for, or very quick to notice, warning signs related to the event	**Never**	**Sometimes**	**Often**	**Always**

XIII.6 Family Adaptability and Cohesion Evaluation Scale

For each subject, **circle** the corresponding answer that represents you.

1	Family members are involved in each others lives	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
2	Our family tries new ways of dealing with problems	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
3	We get along better with people outside our family than inside	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
4	We spend too much time together	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
5	There are strict consequences for breaking the rules in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
6	We never seem to get organized in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
7	Family members feel very close to each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
8	Parents equally share leadership in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
9	Family members seem to avoid contact with each other when at home	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
10	Family members feel pressured to spend most free time together	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
11	There are clear consequences	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**

	when a family member does something wrong					
12	It is hard to know who the leader is in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
13	Family members are supportive of each other during difficult times	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
14	Discipline is fair in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
15	Family members know very little about the friends of other family members	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
16	Family members are too dependent on each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
17	Our family has a rule for almost every possible situation	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
18	Things do not get done in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
19	Family members consult other family members on important decisions	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
20	My family is able to adjust to change when necessary	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
21	Family members are on their own when ther is problem to be solved	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
22	Family members have very little need	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**

	for friends outside family					
23	Our family is highly organized	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
24	It is unclear who is responsible for things (chore, activities) in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
25	Family members like to spend some of their free time with each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
26	We shift household responsibilities from person to person	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
27	Our family seldom does things together	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
28	We feel too connected to each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
29	Our family becomes frustrated when there is a change in our plans or routines	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
30	There is no leadership in this family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
31	Although family members have individual interests, they still participant in family activities	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
32	We have clear rules and roles in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
33	Family members seldom depend on each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
34	We resent family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**

	members doing things outside the family					
35	It is important to follow the rules in our family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
36	Our family has a hard time keeping track of who does various household tasks	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
37	Our family has a good balance of separatenedd and closeness	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
38	When problems arise, we compromise	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
39	Family members mainly operate independently	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
40	Family members feel guilty if they want to spend time away from the family	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
41	Once a decision is made, it is very difficult to modify that decision	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
42	Our family feels hectic and disorganized	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
43	Family members are satisfied with how they communicate with each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
44	Family members are very good listeners	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
45	Family members express affection to	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**

	each other					
46	Family members are able to ask each other for what they want	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
47	Family members can calmly discuss problems with each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
48	Family members discuss their ideas and beliefs with each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
49	When family members ask questions of each other, they get honest answers	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
50	Family members try to understand each other's feelings	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
51	When angry, family members seldom say negative things about each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**
52	Family members express their true feelings to each other	**Strongly Disagree**	**Generally Disagree**	**Undecided**	**Generally Agree**	**Strongly Agree**

How satisied are you with:

Very Dissatisfied	Somewhat Dissatisfied	Generally Satisfied	Very Satisfied	Extremely Satisfied
1	**2**	**3**	**4**	**5**

53	The degree of closeness between family members	**1**	**2**	**3**	**4**	**5**
54	Your family's ability to cope with stress	**1**	**2**	**3**	**4**	**5**
55	Your family's ability to be flexible	**1**	**2**	**3**	**4**	**5**
56	Your family's ability to be shared positive experiences	**1**	**2**	**3**	**4**	**5**
57	The quality of communication between family members	**1**	**2**	**3**	**4**	**5**
58	Your family's ability to resolve conflict	**1**	**2**	**3**	**4**	**5**
59	The amount of time you spend together as a family	**1**	**2**	**3**	**4**	**5**
60	The way problems are discussed	**1**	**2**	**3**	**4**	**5**
61	The fairness of criticism in your family	**1**	**2**	**3**	**4**	**5**
62	Family members concern for each other	**1**	**2**	**3**	**4**	**5**

XIII.7 Inventory of Parent and Peer Attachment

This part is reported in your relations with the parents/guardian and your friends. Please answer the following questions with the answer that feel that expresses you more.

Every of the following statement asks for your sentiments for your parents/guardian.

		Always never or never true	Seldom true	Sometimes true	Often true	Alwost always or always true
1	My parents respect my feelings.	1	2	3	4	5
2	I feel my parents are successful as parents.	1	2	3	4	5
3	I wish I had different parents.	1	2	3	4	5
4	My parents accept me as I am	1	2	3	4	5
5	I have to rely on myself when I have a problem to solve.	1	2	3	4	5
6	I like to get my parents' point of view on things. I'm concerned about.	1	2	3	4	5
7	I feel it's on use letting my feelings show.	1	2	3	4	5
8	My parents sense when I'm upset about something.	1	2	3	4	5
9	Talking over my problems with my parents makes me feel ashamed or foolish.	1	2	3	4	5
10	My parents expect too much from me.	1	2	3	4	5
11	I get upset eaily at home.	1	2	3	4	5
12	I get upset a lot more than my parents know about.	1	2	3	4	5
13	When we discuss things, my parents consider my point of view.	1	2	3	4	5
14	My parents trust my judgment.	1	2	3	4	5
15	My parents have their own problems, so I don't bother them with mine.	1	2	3	4	5
16	My parents help me to understand myself better.	1	2	3	4	5

17	I tell my parents about my problems and troubles.	**1**	**2**	**3**	**4**	**5**
18	I feel angry with my parents.	**1**	**2**	**3**	**4**	**5**
19	I don't get much attention at home.	**1**	**2**	**3**	**4**	**5**
20	My parents encourage me to talk about my difficulties.	**1**	**2**	**3**	**4**	**5**
21	My parents understand me.	**1**	**2**	**3**	**4**	**5**
22	I don't know whom I can depend on these days.	**1**	**2**	**3**	**4**	**5**
23	When I am angry about something, my parents try to be understanding.	**1**	**2**	**3**	**4**	**5**
24	I trust my parents.	**1**	**2**	**3**	**4**	**5**
25	My parents don't understand what I'm going through these days.	**1**	**2**	**3**	**4**	**5**
26	I can count on my parents when I need to get something off my chest.	**1**	**2**	**3**	**4**	**5**
27	I feel that no one understands me.	**1**	**2**	**3**	**4**	**5**
28	If my parents know something is bothering me, they ask me about it.	**1**	**2**	**3**	**4**	**5**

The next set of questions asks you for your relation with your friends.

		Always never or never true	**Seldom true**	**Sometimes true**	**Often true**	**Almost always or always true**
1	I like to get my friends' point of view on things I'm concerned about.	**1**	**2**	**3**	**4**	**5**
2	My friends sense when I'm upset about something.	**1**	**2**	**3**	**4**	**5**
3	When we discuss things, my friends consider my point of view.	**1**	**2**	**3**	**4**	**5**
4	Talking over my problems with my friends makes me feel ashamed or foolish.	**1**	**2**	**3**	**4**	**5**
5	I wish I had different friends.	**1**	**2**	**3**	**4**	**5**
6	My friends understand me.	**1**	**2**	**3**	**4**	**5**
7	My friends encourage me to talk about my difficulties.	**1**	**2**	**3**	**4**	**5**

8	My friends accept me as I am.	**1**	**2**	**3**	**4**	**5**
9	I feel the need to be in touch with my friends more often.	**1**	**2**	**3**	**4**	**5**
10	My friends don't understand what I'm going through these days.	**1**	**2**	**3**	**4**	**5**
11	I feel alone or apart when I am with my friends.	**1**	**2**	**3**	**4**	**5**
12	My friends listen to what I have to say.	**1**	**2**	**3**	**4**	**5**
13	I feel my friends are good friends.	**1**	**2**	**3**	**4**	**5**
14	My friends are fairly easy to talk to.	**1**	**2**	**3**	**4**	**5**
15	When I am angry about something, my friends try to be understanding.	**1**	**2**	**3**	**4**	**5**
16	My friends help me to understand myself better.	**1**	**2**	**3**	**4**	**5**
17	My friends are concerned about my well-being.	**1**	**2**	**3**	**4**	**5**
18	I feel angry with my friends.	**1**	**2**	**3**	**4**	**5**
19	I can count on my friends when I need to get something off my chest.	**1**	**2**	**3**	**4**	**5**
20	I trust my friends.	**1**	**2**	**3**	**4**	**5**
21	My friends respect my feelings.	**1**	**2**	**3**	**4**	**5**
22	I get upset a lot more than my friends know about.	**1**	**2**	**3**	**4**	**5**
23	It seems as if my friends are irritated with me for no reason.	**1**	**2**	**3**	**4**	**5**
24	I tell my friends about my problems and troubles.	**1**	**2**	**3**	**4**	**5**
25	If my friends know something is bothering me, they ask me about it.	**1**	**2**	**3**	**4**	**5**

Appendix XIV: Ethical Approval for Study 3

Ethics Application Ref: PSY 10/ 055

Jan Harrison

Sent: 08 December 2010 11:29

To: Constantina Demetriou

Cc: Lance Slade; Amanda Holmes; Cecilia Essau

Dear Constantina,

Ethics Application (Minor Amendment)

Applicant:	**Constantina Demetriou**
Title:	**Mental Health of Young People in Cyprus. The Influence of Family on Mental Health Need Among Children and Adolescents in Community and Clinical Settings**
Reference:	**PSY 10/ 055**
Department:	**Psychology**
Original Approval Date:	**08.10.10**

Many thanks for your response and the amended documents. I am pleased to confirm that the conditions for approval of the amendment to your above application dated 25.09.12 have now been met. We do not require anything further in relation to this application.

There is one minor issue still to address:

i. In the consent form(s) it still refers "to participate in a 20 interviews". This should (presumably) be "to participate in a 20 min interview".

As this is only a minor condition it is assumed that you will adhere to this condition for approval and therefore we do not require a response.

Please advise us if there are any further changes to the research during the life of the project. Minor changes can be advised using the Minor Amendments Form on the Ethics Website, but substantial changes may require a new application to be submitted.

Many thanks,

Jan Harrison

Ethics Administrator - Research & Business Development Office

University of Roehampton | Froebel College | Roehampton Lane | London | SW15 5PJ

jan.harrison@roehampton.ac.uk| www.roehampton.ac.uk

Tel: +44(0)20 8392 5785

Appendix XV: Consent Form for Parents of Adolescents from Community and Clinical Settings (Study 3)

Roehampton University London

Participant ID number: …..

PARTICIPANT CONSENT FORM

Title of Research Project

MENTAL HEALTH OF YOUNG PEOPLE IN CYPRUS. THE INFLUENCE OF FAMILY ON MENTAL HEALTH NEED AMONG CHILDREN AND ADOLESCENTS IN COMMUNITY AND CLINICAL SETTINGS.

Investigator Contact Details
Constantina Demetriou

PhD Student

Department of Psychology

Holybourne Avenue

London SW15 4JD

c.demetriou@roehampton.ac.uk

Thank you for considering taking part in this research project. The researcher will explain the project to you in detail. Please feel free to ask questions. If you have more questions later, I will discuss them with you. My contact information is as follows: 0035799310707, c.demetriou@roehampton.ac.uk

Description of the project:

This project aims to examine how family impact adolescents' well-being. In addition, it aims to: examine what relationships and support people experience form family members; examine parents and adolescents attitudes towards the roles of family; examine their understanding on how parents impact their adolescents well-being by referring family communication, functioning, attachment and satisfaction.

What will be done:

If you decide to take part in this study here is what will happen: you will be asked to participate in a 20 minutes interview and you will be asked to answer some questions related to you and your family. The interview will be audio-taped and any identifying information will be removed.

Risks or discomfort:
No discomfort or risks are expected from participating in this study.

Benefits of this study:

There may not be a direct benefit to you. A summary of the results of the study will also be available if you are interested. Your participation in the study will help the researcher to investigate family and adolescent's well-being, something that might have further contribution both in our society and in research.

Confidentiality:

Your part in this study is confidential. You will not be identified in reports of the results.

Storage of Data:

All identifying data will be stored in locked containers in the University of Roehampton. . Consent forms, raw data, and processed data (e.g., with codes) will be kept separately. The University of Roehampton requires that all records be kept for a minimum of ten (10) years following the last publication.

Decision to withdraw at any time:

The decision to take part in this study is up to you. You do not have to participate. If you decide to take part in the study, you may withdraw at any time and without giving reason. Whatever you decide will in no way penalise you. If you wish to withdraw, simply inform researcher (Constantina Demetriou), 0035799310707, c.demetriou@roehampton.ac.uk, of your decision.

Publication:

In any publications arising from this study you will not be identified.

However if you would like to contact an independent party please contact the Head of Department or you can also contact the Director of Studies.

Researcher's Contact Details: Details:

Constantina Demetriou, PhD student

Department of Psychology

University of Roehampton

Whitelands College
Holybourne Avenue
London SW15 4JD

c.demetriou@roehampton.ac.uk

+ 357 99 310707

Head of Department's Contact

Dr Diane Bray

Department of Psychology

University of Roehampton

Whitelands College
Holybourne Avenue
London SW15 4JD

d.bray@roehampton.ac.uk

+ 44 (0)20 8392 3627

Director of Studies Contact Details:

Professor Cecilia Essau

Department of Psychology

University of Roehampton

Whitelands College

Holybourne Avenue

London, SW15 4JD

c.essau@roehampton.ac.uk

+ 44 (0)20 8392 3647

CONSENT FOR TO TAKE PART IN A RESEARCH STUDY, FOR PARENTS

- I agree to take part in this study.
- I am also aware that I can withdraw from this study at any time without needing to justify the decision.
- I understand that all my personal data are held and processed in the strictest confidence, in accordance with the Data Protection Act (1998).
- I understand that the information which I provide will be treated in confidence by the researcher and that my identity will be protected in the publication of any findings.

YES ……. NO …….

I agree that the data will be stored in a secure location (in the office of the Director of Studies, Professor Cecilia Essau) and will be held for at least 10 years.

YES ……. NO …….

A copy of this consent form will be retained by the participant.

Name …….

Signature ……

Date ……

Appendix XVI: Consent Form for Adolescents from Community and Clinical Settings (Study 3)

Roehampton University London

Participant ID number: …..

PARTICIPANT CONSENT FORM

Title of Research Project

MENTAL HEALTH OF YOUNG PEOPLE IN CYPRUS. THE INFLUENCE OF FAMILY ON MENTAL HEALTH NEED AMONG CHILDREN AND ADOLESCENTS IN COMMUNITY AND CLINICAL SETTINGS.

Investigator Contact Details
Constantina Demetriou

PhD Student

Department of Psychology

Holybourne Avenue

London SW15 4JD

c.demetriou@roehampton.ac.uk

Thank you for considering taking part in this research project. The researcher will explain the project to you in detail. Please feel free to ask questions. If you have more questions later, I will discuss them with you. My contact information is as follows: 0035799310707, c.demetriou@roehampton.ac.uk

Description of the project:

This project aims to examine how family impact adolescents' well-being. In addition, it aims to: examine what relationships and support people experience form family members; examine parents and adolescents attitudes towards the roles of family; examine their understanding on how parents impact their adolescents well-being by referring family communication, functioning, attachment and satisfaction.

What will be done:

If you decide to take part in this study here is what will happen: you will be asked to participate in a 20 minutes interview and you will be asked to answer some questions

related to you and your family. The interview will be audio-taped and any identifying information will be removed.

Risks or discomfort:
No discomfort or risks are expected from participating in this study. However, if at any point you will feel uncomfortable or upset, appropriate measures will have to be taken such as informing both researcher's supervisor and your parent/guardian.

Benefits of this study:

There may not be a direct benefit to you. A summary of the results of the study will also be available if you are interested. Your participation in the study will help the researcher to investigate family and adolescent's well-being, something that might have further contribution both in our society and in research.

Confidentiality:

Your part in this study is confidential. You will not be identified in reports of the results.

Storage of Data:

All identifying data will be stored in locked containers in the University of Roehampton. Consent forms, raw data, and processed data (e.g., with codes) will be kept separately. The University of Roehampton requires that all records be kept for a minimum of ten (10) years following the last publication.

Decision to withdraw at any time:

The decision to take part in this study is up to you. You do not have to participate. If you decide to take part in the study, you may withdraw at any time and without giving reason. Whatever you decide will in no way penalise you. If you wish to withdraw, simply inform researcher (Constantina Demetriou), 0035799310707, c.demetriou@roehampton.ac.uk, about your decision.

Publication:

In any publications arising from this study you will not be identified.

However if you would like to contact an independent party please contact the Head of Department or you can also contact the Director of Studies.

Researcher's Contact Details: Details:

Constantina Demetriou, PhD student

Department of Psychology

University of Roehampton

Whitelands College
Holybourne Avenue
London SW15 4JD

c.demetriou@roehampton.ac.uk

+357 99 310707

Head of Department's Contact

Dr Diane Bray

Department of Psychology

University of Roehampton

Whitelands College
Holybourne Avenue
London SW15 4JD

d.bray@roehampton.ac.uk

+ 44 (0)20 8392 3627

Director of Studies Contact Details:

Professor Cecilia Essau

Department of Psychology

University of Roehampton

Whitelands College

Holybourne Avenue

London, SW15 4JD

c.essau@roehampton.ac.uk

+ 44 (0)20 8392 3647

CONSENT FOR TO TAKE PART IN A RESEARCH STUDY, FOR ADOELSCENT

- I agree to take part in this study.
- I am also aware that I can withdraw from this study at any time without needing to justify the decision.
- I understand that all my personal data are held and processed in the strictest confidence, in accordance with the Data Protection Act (1998).
- I understand that the information which I provide will be treated in confidence by the researcher and that my identity will be protected in the publication of any findings.

YES ……. NO …….

I agree that the data will be stored in a secure location (in the office of the Director of Studies, Professor Cecilia Essau) and will be held for at least 10 years.

YES ……. NO …….

A copy of this consent form will be retained by the participant.

Name …….

Signature ……

Date ……

CONSENT FOR TO TAKE PART IN A RESEARCH STUDY, PARENTAL PERMISSION

- I agree for my child to take part in this study.
- I am also aware that my child can withdraw from this study at any time without needing to justify his/her decision.
- I understand that all my child's personal data will be held and processed in the strictest confidence, in accordance with the Data Protection Act (1998).
- I understand that the information which my child provides will be treated in confidence by the researcher and that my child's identity will be protected in the publication of any findings.

YES …… NO ……

I agree that the data will be stored in a secure location (in the office of the Director of Studies, Professor Cecilia Essau) and will be held for at least 10 years.

YES …… NO ……

Child's name …….

Relationship to the child …….

Parent/Guardian's Name …….

Signature ……

Date ……

Appendix XVII: Debrief Form (Study 3)

University of Roehampton London

Dear Participant,

Thank you for participating in my study. I very much appreciate you taking the time to allow me to collect data for my research.

Description of the project and researcher:

I am Constantina Demetriou, and I am a PhD student in Psychology at the University of Roehampton.

This project aims to examine how family impact adolescent's well-being.

A particular aim of this study is to examine how family communication, family satisfaction, family attachment and family functioning influence adolescent's well-being.

There may not be a direct benefit to you through taking part in this study, but your participation might contribute to further knowledge on adolescent's well-being.

Decision to withdraw at any time:

The decision to take part in this study was up to you. You have the right to withdraw at any time and without giving reason. Whatever you decide will in no way penalise you. If you wish to withdraw, simply inform Constantina Demetriou, 0035799310707, c.demetriou@roehampton.ac.uk, of your decision.

Thank you again for your time and participation.

Regards,

Constantina Demetriou

Please note: if you have a concern about any aspect of your participation or any other queries please raise this with the researcher. However if you would like to contact an independent party please contact the Head of Department.

Researcher's Contact Details:

Constantina Demetriou, PhD Student

Department of Psychology

University of Roehampton

Whitelands College
Holybourne Avenue
London SW15 4JD

c.demetriou@roehampton.ac.uk

00357 99 310707

Head of Department's Contact Details:

Dr Diane Bray

Department of Psychology

University of Roehampton

Whitelands College
Holybourne Avenue
London SW15 4JD

d.bray@roehampton.ac.uk

020 8392 3627

If you are troubled or worried about any aspect of the study, or issues it may have raised, or wish to speak in confidence about mental health needs, please feel free to contact any of the following agencies:

- **Social Welfare Services of the Ministry of Labour and Social Insurance**
  www.central.sws@sws.misi.gov.cy

  Tel: 00357 22 40 67 09

  This service has a specific unit for family and children which aims to support the Family unit in order to enable family members to effectively perform their roles and responsibilities; to resolve family disputes that threaten the unity of family; to safeguard the protection and welfare of children.

- **Family Violence Services and Support**
  www.familyviolence.gov.cy

  Tel: 00357 22 77 58 88

  This committee focuses on any form of violence that children and adolescents experience with their family.

- **Childline**
  www.preventionsection.org.cy

  Tel: 1410

  This helpline is open Monday to Friday from 10 a.m. to 24 p.m. and from 15 p.m. to 24 p.m. during the weekends. Childline is free of charge in Cyprus and it can help you if you feel distress or anxious and you would like some support.

Appendix XVIII: Interview Schedule for Adolescents from both Community and Clinical Settings (Study 3)

General Opening:

Hi! I am Constantina and I am doing a research on family and adolescents' psychopathology. I am interested to find out how family factors impact adolescents well-being. So, with this interview I would like to know your personal experiences, opinions, thoughts and activities in this area, as well as your opinions about your interaction with your parents. I am also interested in your parents' thoughts, thus, I will interview them separately. I assure you that all the information I will get from you will be confidential. You are free to withdraw at any time.

(Give demographics document and the consent form.)

I would ask you few questions about you and your family, and please state whether there is a difference between your mother and your father.

1. How have you been raised? In terms of family communication, attachment between you and your parents, how decisions were made.

2. How do you take decisions as a family?

3. If you break a role, are there any consequences? If yes, what?

4. If you have an issue, who are you referring to in order to discuss it?

5. Do you feel free to discuss everything with your parents?

If you have a problem either personal or at school etc:

6. Do you discuss it with you parents? Which one?
    a. How they react?
    b. Are they listening to you?

7. Can you please describe your relationship with your parents? Each one separately.

I know that at this stage of your life it is very important for you to have friends.

8. Describe a bit your relationship with your friends,
    a. Do you have a lot of friends? Close friends?
    b. Are there any relationship between your parents and your friends?

To close with

9. I would like to ask you, which things that happen within your family make you happy or unhappy?

Thank you very much for your participation and your valuable contribution in my research!

Appendix XIX: Interview Schedule for Parents of Adolescents from both Community and Clinical Settings (Study 3)

General Opening:

Hi! I am Constantina and I am doing a research on family and adolescents' psychopathology. I am interested to find out how family factors impact adolescents well-being. So, with this interview I would like to know your personal experiences, opinions, thoughts and activities in this area, as well as your opinions about your interaction with your child. I am also interested in your child's thoughts, thus, I will interview him/her separately. I assure you that all the information I will get from you will be confidential. You are free to withdraw at any time.

(Give demographics document and the consent form.)

It is well know that in old times in Cyprus, parents were stricter that nowadays.

1. How have you been raised? In terms of family communication, attachment between you and your parents, how decisions were made.

2. You as a parent now, how do you raise your child?
    a. How do you take decisions as a family?
    b. If your child breaks a role in your family, what do you do? Are there any consequences?
    c. Do you discuss any issues that rise with your child?
    d. Do you feel free to talk about anything within your family?
    e. What do you do in your free time as a family?
    f. Do you think that you are having good time as a family?
    g. How do you solve a problem or a fight that coming up with your family members?

I would like now to talk a bit about trust between family members.

Children in adolescence period may sometimes do not trust their parents, or may not talk to them as much as parents want them to.

3. I would like you to talk about how you think that trust works between you and your child.
    a. If I don't get an answer and the parent starts speaking about general stuff and mention the things that they want to have rather than mentioning what it is really going on, I can say: what you just mentioned are what you wanted to have or happening between you and your child. Can you please tell me more specific about what happens in reality?

I would like now to talk a bit about family attachment.

4. Can you please describe your relationship with your child?

5. What are the things that your child wants from you and asks you at this age?

In adolescence period, children want to spend a lot of time with their friends, and want to feel a member of a group as well.

6. What your child does considering friends and friendships?
7. What is your opinion on this?
8. Are you interested to be involved at this part of your child's life and get know his/her friends?

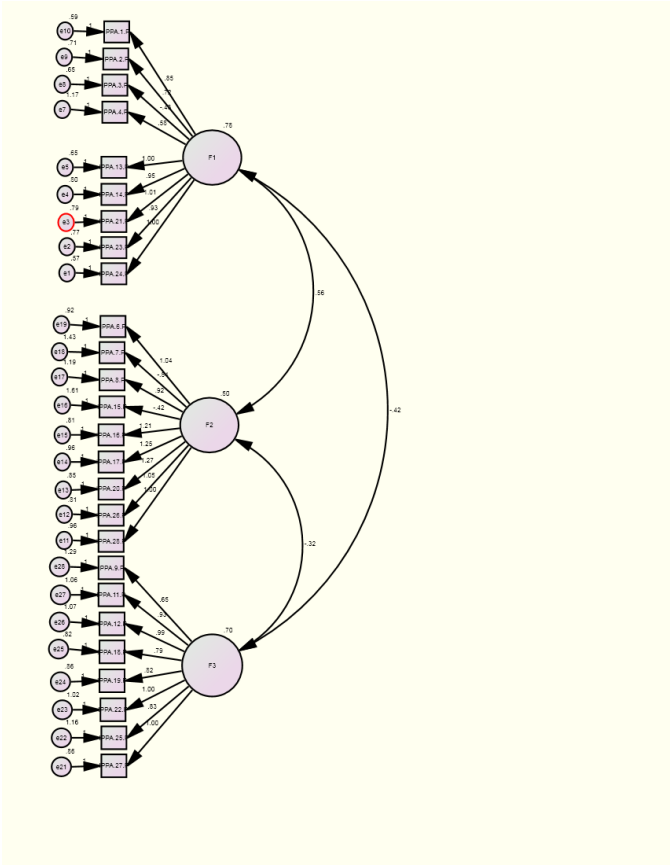
To close with

9. I would like to ask you, which things that happen within your family make your child happy or unhappy?

Thank you very much for your participation and your valuable contribution in my research!

Appendix XX: Confirmatory factor analysis for IPPA Parent Scale

XX.1: Model 1 – Bad fit



CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	59	1174.279	347	.000	3.384
Saturated model	406	.000	0		
Independence model	28	5968.601	378	.000	15.790

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.104	.864	.841	.739
Saturated model	.000	1.000		

Model	RMR	GFI	AGFI	PGFI
Independence model	.399	.318	.267	.296

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.803	.786	.853	.839	.852
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.918	.737	.782
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	827.279	726.965	935.175
Saturated model	.000	.000	.000
Independence model	5590.601	5343.726	5843.894

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	1.947	1.372	1.206	1.551
Saturated model	.000	.000	.000	.000
Independence model	9.898	9.271	8.862	9.691

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.063	.059	.067	.000
Independence model	.157	.153	.160	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	1292.279	1298.241	1552.090	1611.090
Saturated model	812.000	853.024	2599.851	3005.851
Independence model	6024.601	6027.430	6147.901	6175.901

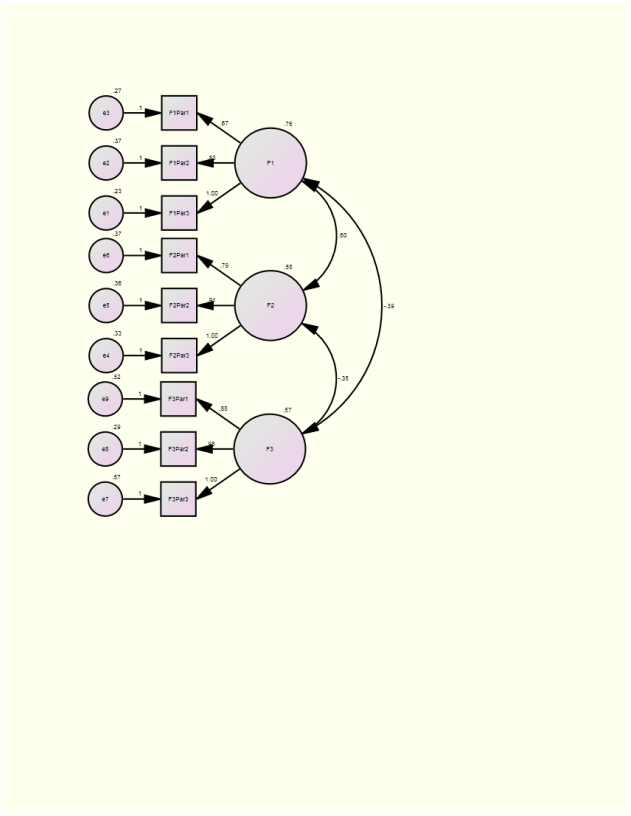
ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	2.143	1.977	2.322	2.153
Saturated model	1.347	1.347	1.347	1.415
Independence model	9.991	9.582	10.411	9.996

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	202	212
Independence model	43	45

XX.2: Model 2 – Good fit



Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	21	126.529	24	.000	5.272
Saturated model	45	.000	0		
Independence model	9	2602.918	36	.000	72.303

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.037	.954	.914	.509
Saturated model	.000	1.000		
Independence model	.364	.362	.203	.290

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.951	.927	.960	.940	.960
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.667	.634	.640
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	102.529	71.012	141.570
Saturated model	.000	.000	.000
Independence model	2566.918	2403.264	2737.893

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.210	.170	.118	.235
Saturated model	.000	.000	.000	.000
Independence model	4.317	4.257	3.986	4.540

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.084	.070	.099	.000
Independence model	.344	.333	.355	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	168.529	169.237	261.004	282.004
Saturated model	90.000	91.518	288.161	333.161
Independence model	2620.918	2621.222	2660.551	2669.551

ECVI

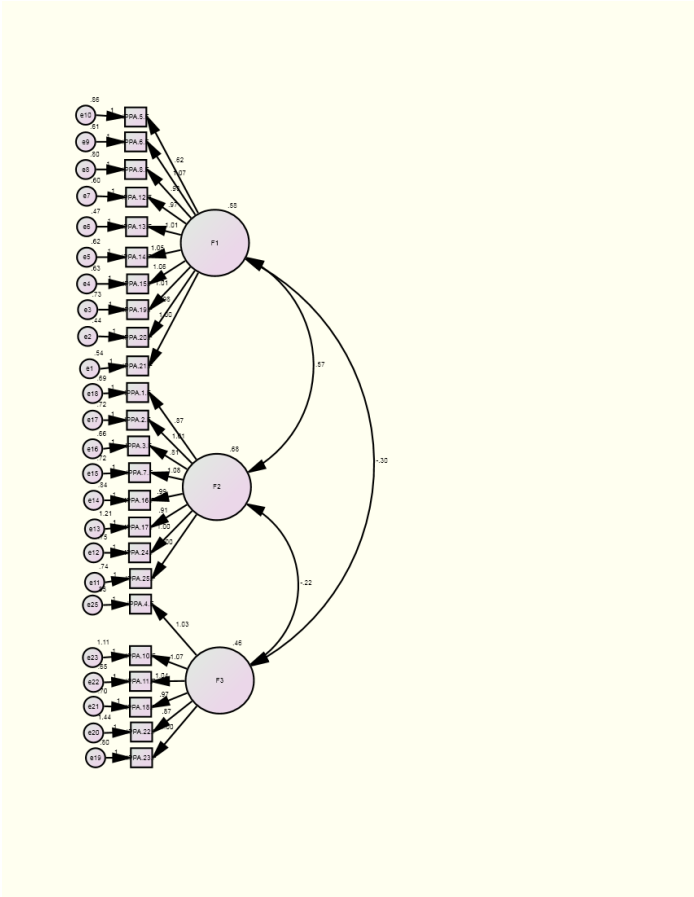
Model	ECVI	LO 90	HI 90	MECVI
Default model	.279	.227	.344	.281
Saturated model	.149	.149	.149	.152
Independence model	4.346	4.075	4.630	4.347

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	174	205
Independence model	12	14

Appendix XXI: Confirmatory factor analysis for IPPA Peer Scale

XXI.1: Model 1 – Bad fit



CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	53	1190.968	272	.000	4.379
Saturated model	325	.000	0		
Independence model	25	6815.202	300	.000	22.717

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.107	.864	.838	.723
Saturated model	.000	1.000		
Independence model	.436	.251	.189	.232

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.825	.807	.860	.844	.859
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.907	.748	.779
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	918.968	815.843	1029.619
Saturated model	.000	.000	.000
Independence model	6515.202	6249.825	6786.952

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	1.975	1.524	1.353	1.707
Saturated model	.000	.000	.000	.000
Independence model	11.302	10.805	10.365	11.255

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.075	.071	.079	.000
Independence model	.190	.186	.194	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	1296.968	1301.745	1530.358	1583.358
Saturated model	650.000	679.289	2081.162	2406.162
Independence model	6865.202	6867.455	6975.291	7000.291

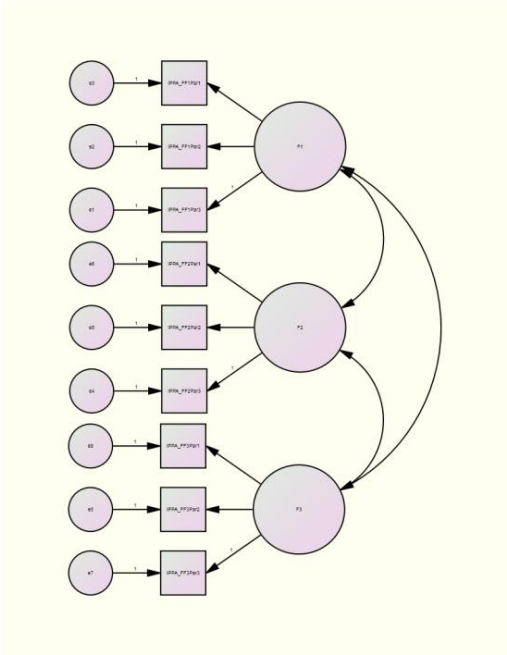
ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	2.151	1.980	2.334	2.159
Saturated model	1.078	1.078	1.078	1.127
Independence model	11.385	10.945	11.836	11.389

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	158	167
Independence model	31	32

XXI.2: Model 2 – Good fit



CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	21	81.139	24	.000	3.381
Saturated model	45	.000	0		
Independence model	9	2882.499	36	.000	80.069

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.065	.970	.943	.517
Saturated model	.000	1.000		
Independence model	.886	.351	.188	.281

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.972	.958	.980	.970	.980
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.667	.648	.653
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	57.139	33.495	88.382
Saturated model	.000	.000	.000
Independence model	2846.499	2674.021	3026.285

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.135	.095	.056	.147
Saturated model	.000	.000	.000	.000
Independence model	4.780	4.721	4.435	5.019

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.063	.048	.078	.074
Independence model	.362	.351	.373	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	123.139	123.847	215.614	236.614
Saturated model	90.000	91.518	288.161	333.161
Independence model	2900.499	2900.803	2940.131	2949.131

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	.204	.165	.256	.205
Saturated model	.149	.149	.149	.152
Independence model	4.810	4.524	5.108	4.811

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	271	320
Independence model	11	13

Appendix XXII: Normal Distribution of Variables in Study 1

Table 1: ***Indices of Normality for Study Variables***

Variable	Skewness	Kurtosis
YSR		
YSR Internalizing Problems	.782	.119
YSR Externalizing Problems	.911	.912
YSR Total Scores	.699	.421
IPPA		
Parent Trust	-.867	.262
Parent Communication	-.223	-.448
Parent Alienation	.438	-.616
Parent Total Score	-.882	1.382
Peer Trust	-.972	.576
Peer Communication	-.682	.075
Peer Alienation	.740	.073
Peer Total Score	-1.068	1.816
FACES		
Balanced Cohesion	-.540	.481
Balanced Flexibility	-.442	.654
Disengaged	.235	-.014
Enmeshed	.277	.348
Rigid	-.024	.172
Chaotic	.054	.145
Communication	-.333	-.129
Satisfaction	-.407	.206
Cohesion Score	-.274	-.114
Flexibility Score	-.498	1.081

BIBLIOGRAPHY

Achenbach, T. M. (1966). The classification of children's psychiatric symptoms: a factor analytic study. *Psychological Monographs: General and Applied 80*(7), 1-37.

Achenbach, T. M. (1985). *Assessment and taxonomy of child and adolescent psychopathology*. Beverly Hills, CA: Sage.

Achenbach, T. M. (1991a). *Integrative guide for the 1991 CBCL/4-18, YSR, and TRF profiles*. Burlington, VT: Department of Psychiatry, University of Vermont.

Achenbach, T. M., (1991b). *Manual of the youth self report and 1991 profiles*. Burlington, VT: University of Vermont.

Achenbach, T. M. (2009). *The Achenbach System of Empirically Based Assessment (ASEBA): Development, Findings, Theory, and Applications*. Burlington, VT: University of Vermont Research Center for Children, Youth and Families.

Achenbach, T., Becker, A., Dopfner, M., Heiervang, E., Roessner, V., Steinhausen, H. C., & Rothenberger, A. (2008). Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ intrusments: research findings, applications, and future directions. *The Journal of Child Psychology and Psychiatry*, *49*(3), 251-275.

Achenbach, T.M. & Brown, J.S. (1991). *Bibliography of published studies using the Child Behavior Checklist and related materials*. Burlington: University of Vermont.

Achenbach, T. M., Dumenci, L., & Rescorla, L. A. (2002). Ten-year comparisons of problems and competencies for national samples of youth. *Journal of Emotional and Behavioral Problems, 10*(4), 194-203.

Achenbach, T. M., & Edelbrock, C. S. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington, VT: University Associates in Psychiatry.

Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms & profiles*. Burlington: University of Vermont Research Center for Children, Youth & Families.

Achenbach, T. M., Rescorla, L. A., & Ivanova, M. Y. (2012). International epidemiology of child and adolescent psychopathology I: diagnosis, dimensions and conceptual issues. *Journal of American Academy of Child and Adolescent Psychiatry*, *51*(12), 1261-1272.

Ackard, D. M., Neumark-Sztainer, D., Story, M., & Perry, C. (2006). Parent-child connectedness and behavioral and emotional health among adolescents. *American Journal of Preventive Medicine, 30*(1), 59-66.

Adamczyk-Robinette, S. L., Fletcher, A. C., & Wright, K. (2002). Understanding the Authoritative Parenting-Early Adolescent Tobacco Use Link: The Mediating Role of Peer Tobacco Use. *Journal of Youth and Adolescence*, *31*(4), 311-318.

Afifi, M. (2007). Gender differences in mental health. *Singapore Medical Journal*, *48*(5), 385-391.

Aggleton, P., Hurry, J., & Warwick, I. (2000). *Young people and mental health*. Chichester, UK: Willey.

Ainsworth, M. D. S. (1989). Attachment beyond infancy. *The American Psychologist, 44*(4), 709-716.

Ainsworth, M. D. S., Blehan, M. C., Waters, E., & Walls, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, N.J.: Erlbaum.

Aldwin, C.M. (2007). *Stress, coping and development* (2nd Ed.) New York, NY: Guilford.

Alexander, J. F. (1973). Defensive and supportive communication in normal and deviant families. *Journal of Consulting and Clinical Psychology, 40*, 223-231.

Allen, J., Boykin, K., & Bell, K. (2000). *Autonomy in discussions vs autonomy in decision making as predictors of developing close frienship competence*. Paper presented that the Biennial Meetings of the Society for Research on Adolescent. Chicago, IL. Retrieved from http://people.virginia.edu/~psykliff/pubs/publications/joesra2000.pdf.

Allen, J., & Hauser, S. T. (1996). Autonomy and relatedness in adolescent-family interactions as predictors of young adults' states of mind regarding attachment. *Development and Psychopathology*, 8, 793-809.

Allen, J. P., Hauser, S. T., & Borman-Spurrell, E. (1996). Attachment insecurity and related sequelae of severe adolescent psychopathology: An eleven-year follow-up study. *Journal of Consulting and Clinical Psychology*. *64*, 254-263.

Allen, J. P., Hauser, S. T., Elckholt, C., Bell, K. L., & O'Connor, T. G. (1994). Autonomy and relatedness in family interactions as predictors of expressions of negative adolescents affect. *Journal of Research on Adolescence, 4*(4), 535-552.

Allen, J. P., Hauser, S. T., O'Connor, T. G., Bell, K. L., & Eickholt, C. (1996). The connection of observed hostile family conflict to adolescents' developing autonomy and relatedness with parents. *Development and Psychopathology*, *8*(2), 425–442.

Allen, J. P., & Land, D. (1999). Attachment in adolescents. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (pp. 319–335). New York, NY: Guildford Press.

Allen, J. P., Moore, C., Kuperminc, G.. & Bell, K. (1998). Attachment and adolescents psychosocial functioning. *Child Development, 69*(5), 1406-1419.

Allesandri, S. M., & Wozniak, R. H. (1987). The child's awareness of parental beliefs concerning child: A developmental study. *Child Development, 58*, 316-323.

Allison, S., Stacey, K., Dadds, V., Roeger, L., Wood, A., & Martin, G. (2003). What the family brings: gathering evidence for strengths-based work. *The Association for Family Therapy and Systematic Practice, 25*, 263-284.

Amato, P. R., & Keith, B. (1991). Parental divorce and the well-being of children: A meta analysis. *Psychological Bulletin, 110*, 26-46.

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders,* 4th Revised Edition. Washington DC: American Psychiatric Press Inc.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders, 4th Edition, Text Revision*. Washington DC: American Psychiatric Press Inc.

Ansbacher, H. L., & Ansbacher, R. R. (1956). *The individual psychology of Alfred Adler: A system- atic presentation in selections from his writings*. New York, NY: Harper.

Arbuckle, J. L., & Wothke, W. (1999). Amos 4.0 User's Guide. Chicago, IL: SPSS Inc. and Small Waters Corporation.

Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationships to psychological well-being in adolescents. *Journal of Youth and Adolescents, 16*(5), 421-454.

Armstrong, M. I., & Boothroyd, R. A. (2008). Predictors of emotional well-being in at risk adolescent girls: developing preventive intervention strategies. *Journal of Behavioural Health Services & Research, 35*(4), 435-453.

Aronson, K. R., Almeida, D. M., Stawski, R. S., Cousino-Klein, L., & Kozlowski, L. T. (2008). Smoking is associated with worse mood on stressful days: Results from national diary study. *Annals of Behavioural Medicine, 36*(3), 259-269.

Aseltine, R. H. (1996). Pathways linking parental divorce with adolescent depression. *Journal of Health and Social Behavior*, *37*(2), 133-148.

Ashby, J. S., & Schoon, A. (2002). Living the dream? A qualitative retrospective study exploring the role of adolescent aspirations across life span. *Developmental Psychology, 48*(6), 1694-1706.

Astone, N. M., & Mc Lanahan, S. S. (1991). Family structure, parental practices and high school completion. *American Sociological Review, 56*, 309-320.

Bailey, S. (2000). Serious antisocial behavior. In P. Aggleton, J. Hurry, & I. Warwick (Eds). *Young people and mental health*. Chichester, UK: Willey.

Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., & Juffer, F. (2005). Disorganized infant attachment and preventative interventions: A review and meta-analysis. *Infant Mental Health Journal, 26*(3), 191-216.

Bancroft, J. (2009). *Human sexuality and its problems* (3rd ed.). Edinburgh: Churchill Livingstone Elsevier.

Bandalos, D. L. (2008). Is parceling really necessary? A comparison of results from item parceling and categorical variable methodology. *Structural Equation Modeling, 15*(2), 211-240.

Barahmand, U. (2008). Age and gender differences in adolescents worry. *Personality and Individual Differences, 45*, 778-783.

Barber, B. K., (1992). Family, personality and adolescent problem behaviors. *Journal of Marriage and the Family, 54*, 69-79.

Barber, B. K., (1996). Family cohesion and enmeshment: different constructs, different effects. *Journal of Marriage and the Family, 58*, 433-441.

Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development, 67*, 3296-3319.

Barlow, D. H. (2002). *Anxiety and its disorders: The nature and treatment of anxiety and panic* (2nd ed.). New York, NY: Guildford Press.

Barnes, G. M., & Farrell, M. P. (1992). Parental support and control as predictors of adolescent drinking, delinquency, and related problem behaviors. *Journal of Marriage and the Family, 54*, 763–776.

Barone, L., & Guiducci, V. (2009). Mental representations of attachment in Eating Disorders: a pilot study using the Adult Attachment Interview. *Attachment & Human Development*, *11*(4), 405-417

Bartholomew, K. & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226-244.

Bates, J., & Bayles, K. (1988). The role of attachment in the development of behaviour problems. In Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting. *American PsychologistI, 55*(2), 218-232.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs, 75*(1), 43-88.

Baumrind, D., & Moselle, K. A. (1985). A developmental perspective on adolescent drug abuse. *Advances in Alcohol and Substance Use, 5,* 41-67.

Baxter, L. A. & Clark, C. L. (1996). Perceptions of family communication patterns and the enactment of family rituals. *Western Journal of Communication, 60* 254-268.

Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz-Spine, M. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine, 25*(24), 3186-3191.

Bell, R. Q., & Chapman, M. (1986). Child effects in studies using ex- perimental or brief longitudinal approaches to socialization. *Developmental Psychology, 22,* 595-603.

Bennett, D. S., Ambrosini, P. J., Kudes, D., Metz, C., & Rabinovich, H. (2005). Gender differences in adolescent depression: Do symptoms differ for boys and girls? *Journal of Affective Disorders, 89*(1), 35-44.

Bentler, P. M. (1990). Comparative Fit Indexes in Structural Models. *Psychological Bulletin, 107*(2), 238-46.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structure. *Psychological Bulletin, 88*, 588-606.

Berlo, D. K. (1960). *The process of communication*. New York, NY: Holt, Rinehart, & Winston.

Berndt, T. J. (1979). Developmental changes in conformity to peers and parents. *Developmental Psychology, 15*, 606-616.

Bettmann, J. E., Olson-Morrison, D., Jasperson, R. A. (2011). Attachment in wilderness therapy: A qualitative study on attachment relationships. *Journal of Experiential Education, 34*(2), 176-194.

Bierman, K. L. (2004). *Peer rejection: Developmental processes and intervention strategies*. New York, NY: The Guilford Press.

Block, J. H., Block, J., & Gjerde, P. J. (1986). The personality of children prior to divorce. *Child Development, 57*, 827-840.

Bloom, B. L. (1985). A factor analysis of self-report measures of family functioning. *Family Process, 24*(2), 225-239.

Bogels, S. M., & Brechman-Toussaint, M. L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review, 26*(7), 834-856.

Bogels, S. M., & Phares, V. (2008). Fathers' role in the etiology, prevention and treatment of child anxiety: A review and new model. *Clinical Psychology Review, 28*, 539-558.

Bomar, P. (2004). *Promoting health in families: applying family research and theory to nursing practice* (3rd ed.). Philadelphia: Saunders.

Bongers, I. L., Koot, H. M., Van der Ende, J., & Verhulst, F. C. (2003). The normative development of child and adolescent problem behavior. *Journal of Abnormal Psychology, 112*, 179-192.

Boswell, C., & Cannon, S (2007). *Introduction to nursing research: incorporating evidence-based practice*. Sudbury: Jones and Bartlett Publishers

Bowlby, J. (1969). *Attachment and Loss, Vol. 1. Attachment*. New York, NY: Basic Books.

Bowlby, J. (1973b). *Attachment and Loss, Vol. 2. Separation: Anxiety and Anger*. New York, NY: Basic Books.

Bowlby, J. (1980). *Attachment and Loss, Vol. 3. Loss: Sadness and Depression*. New York, NY: Basic Books.

Bradley, S. J. (2000). *Affect regulation and the development of psychopathology*. New York, NY: Guilford Press.

Bradshaw, J., Hoelscher, P., & Richardson, D. (2007). An index of child well-being in the European Union. *Social Indicators Research, 80*, 133-177.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.

Brendgen, M., Vitaro, F., Tremblay, R. E., & Lavoie, F. (2001). Reactive and proactive aggression: Predictions to physical violence in different contexts and moderating effects of parental monitoring and caregiving behavior. *Journal of Abnormal Child Psychology, 29*, 293–304.

Briggs, S. (2009). Risks and opportunities in adolescence: understanding adolescent mental health difficulties. *Journal of Social Work Practice, 23*(1), 49-64.

Bronstein, P. (1984). Differences in mothers' and fathers' behaviours towards children: A cross-cultural comparison. *Developmental Psychology, 20*, 995-1003.

Brooks-Gunn, J., & Warren, M. P. (1989). Biological and social contributions to negative affect in young girls. *Child Development, 60*, 40-55.

Brotherton, G., Davies, H., & McGillivray, G. (2010). *Working with Children, Young People and Families*. London: SAGE.

Brown, B. B., Lohr, M. J., & McClenahan, E. L. (1986). Early adolescents' perceptions of peer pressure. *The Journal of Early Adolescence, 6*(2), 139-154.

Brown, L. S., & Wright, J. (2003). The relationship between attachment strategies and psychopathology in adolescence. *Psychology and Psychotherapy: Theory, Research and Practice, 76*, 351-367.

Buist, K. L., Dekovic, M., Meeus, W., & van Aken, M. A. G. (2004). The reciprocal relationship between early adolescent attachment and internalizing and externalizing problem behavior. *Journal of Adolescent, 27*, 251-266.

Burnett-Zeigler, I., Walton, M. A., Ilgen, M., Barry, K. L., Chermack, S. T., Zucker, R. A., Zimmerman, M. A., et al. (2012). Prevalence and correlates of mental health problems and treatment among adolescents seen in primary care. *Journal of Adolescent Health, 50*, 559-564.

Burke, K., Brennan, L., & Cann, W. (2012). Promoting protective factors for young adolescents: ABCD Parenting young adolescents program randomized controlled trial. *Journal of Adolescence, 35*(5), 1315-1328.

Burstein, M., Ginsburg, G. S., Petras, H., & Ialongo, N. (2010). Parent psychopathology and youth internalizing symptoms in an urban community: a latent growth model analysis. *Child Psychiatry and Human Development, 41*(1), 61-87.

Bussing, R., Gary, F. A., Mason, D. M., Leon, C. E., Sinha, K., & Garvan, C. W. (2003a). Child temperament, ADHD and caregiver strain: Exploring relationships in an epidemiological sample. *Journal of the American Academy of Child & Adolescent Psychiatry, 42*(2), 184–192.

Bussing, R., Zima, B. T., Gary, F. A., Mason, D. M., Leon, C. E., Sinha, K., et al. (2003b). Social networks, caregiver strain, and utilization of mental health

services among elementary school students at high risk for ADHD. *Journal of the American Academy of Child & Adolescent Psychiatry*, *42*, 842–850.

Butcher, J. N., Mineka, S., Holey, J. M., & Carson, R. C. (2004). *Abnormal psychology,* (12th Ed.). Boston: Pearson.

Canino, G., & Alegria M. (2008). Psychiatric diagnosis – is it universal or relative to culture? *The Journal of Child Psychology and Psychiatry, 49*(3), 237-250.

Canino, G., Shrout, P. E., Rubio-Stipec, M., Bird, H. R., Bravo., M., Ramirez, R., Chavez, L., et al., (2004). The DSM-IV rates of child and adolescent disorders in Puerto Rico. *Archives of General Psychiatry, 61*(8), 85-93.

Capaldi, D. M., Dishion, T. J., Stoolmiller, M., & Yoerger, K. (2001). Aggression toward female partners by at-risk young men: The contribution of male adolescent friendships. *Developmental Psychology, 37*, 61–73.

Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development*, *72*, 1832-1843.

Chaplin, T. M., & Aldao, A. (2013). Gender differences in emotions expression in children: a meta-analytic review. *Psychological Bulletin, 139*(4), 735-765.

Cherlin, A. J. (1999). Going to extremes: Family structure, children's well-being and social science. *Demography*, *36*(4), 421-428.

Chirkov, V. I., & Ryan, R. M. (2001). Parent and teacher autonomy-support in Russian and U.S. adolescents: Common effects on well-being and academic motivation. *Journal of Cross-Cultural Psychology, 32*(5), 618-635.

Chorpita, B. F. (2001). Control and the development of negative emotion. In Magaro, M. M., & Weisz, J. R. (2006). Perceived control mediates the relation between parental rejection and youth depression. *Journal of Abnormal Child Psychology, 34*, 867-876.

Ciccheti, D., & Rogosch, F. A. (2002). A developmental psychopathology perspective of adolescence. *Journal of Consulting and Clinical Psychology, 70*(1), 6-20.

Clark, K. E., & Ladd, G. W. (2000). Connectedness and autonomy support in parent-child relationship: Links to children's socioemotional orientation and peer relationship. *Developmental; Psychology, 36*, 485-498.

Clausen, S. E. (1996). Parenting styles and Adolescent Drug Use Behaviors. *Childhood, 3*(3), 403-414.

Claveirole, A., & Gaughan, M., (2011). *Understanding Children and Young People's Mental Health*. West Sussex: Wiley-Blackwell.

Cole, P. M., Michel, M. K., & Teti, L. O. D. (1994). The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the Society for Research in Child Development, 59*(2-3), 73- 100.

Cole-Detke, H., & Kobak, R. R. (1996). Attachment processes in eating disorder and depression. *Journal of Consulting and Clinical Psychology, 64*, 282–290.

Coleman, J., & Hoffer, T. (1987). *Public and private high schools: The impact of communities*. New York: Basic books, New York

Cochran, M. & Bo, I. (1989). The social networks, family involvement, and pro-and antisocial behaviour of adolescent males in Norway. *Journal of Youth and Adolescence, 18*, 377-398.

Collins, W., & Russell, G. (1991). Mother-child and father-child relationships in middle adolescents: A developmental analysis. *Developmental Review, 11*, 99-136.

Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting. *American Psychologist, 55*(2), 218-232.

Costello, E. J., Copeland, W., & Angold, A. (2011). Trends in psychopathology across the adolescent years: what changes when children become adolescents, and when adolescents become adults? *The Journal of Child and Psychology and Psychiatry, 52*(10), 1015-1025.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry, 60*(8), 837-844.

Cote, S. M., Vaillancourt, T., Barker, E. D., Nagin, D., & Tremblay, R. E. (2007). Continuity and change in the joint development of physical and indirect aggression in early childhood. *Development and Psychopathology, 19*, 37-55.

Cowan, G., Drinkard, J., & MacGavin, L. (1984). Changing perceptions of family cohesion and power across adolescents. *Journal of Personality and Social Psychology, 47*, 1391-1398.

Creswell, J. W., & Plano Clark, V. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: SAGE.

Crick, N. B. (1996), The role f overt aggression, relational aggression, and prosocial behaviour in the prediction of children's future social adjustment. *Child development, 67*, 2317-2327.

Crick, N. R., & Zahn-Wexler, C. (2003). The development of psychopathology in females and males: Current progress and future challenges. *Development and Psychopathology, 15*, 719-742.

Crittenden, P. M. (1990). Toward a concept of autonomy in adolescents with disability. *Children's Health Care, 19*(3), 162-168.

Cronbach, L. J. (1957). The two disciplines of scientific psychology. *American Psychologists, 12*, 671-684.

Crowell, J. A., & Feldman, S. S. (1991). Mother's working models of attachment relationships end mother and child behaviour during separation and reunion. *Developmental Psychology, 27*(4), 597-605.

Cuffe, S. P., McKeown, R. E., Addy, C. L., & Garrison, C. Z. (2005). Family and psychosocial risk factors in a longitudinal epidemiological study of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*, 121–129

Cummings, E. M., & Davies, P. (1994a). *Children and marital conflict: the impact of family dispute and resolution*. New York, NY: Guildford Press.

Cummings, J., Pellegrine, D., Notarius, C. & Cummings, E. (1989). Children's responses to angry adult behaviour as a function of marital distress and history of interparent hostility. *Child and Development, 60*(5), 1035-10-43.

Curman, H., & Nylander, I. (1976). A 10-year prospective follow up study of 2268 cases at the child guidance clinics in Stockholm. *Acta Paediatrica Scandinavica, 260*, 1-71.

Daddis, C., & Randolph, D. (2010). Dating and disclosure: adolescent management of information regarding romantic involvement. *Journal of Adolescence, 33*(2), 309-320.

Dallos, R., & Vetere, A. (2005). *Research methods in Psychotherapy*. Maidenhead: McGraw Hill/Open University Press.

Danubio, M. E., De Simone, M., Vecchi, F., Amicone, E., Altobelli, E., & Gruppioni, G. (2004). Age at menarche and age of onset of pubertal characteristics in 6-14-year-old girls from the Province of L'Aquila (Abruzzo, Italy). *American Journal of Human Biology, 16*(4), 470-478.

De Wolf, M. S., & Van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development, 68*(4), 571-591.

Dearing, K. F., Hubbard, J. A., Ramsden, S. R., Parker, E. H., Relyea, N., & Smithmyer,C. M., et al. (2002). Children's self-reports about anger regulation: Direct and indirect links to social preference and aggression. *Merrill-Palmer Quarterly, 48*, 308-336.

Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: human needs and the self determination of behaviour. In Soenens, B., & Beyers, W. (2012). The cross-cultural significance of control and autonomy in parent-adolescent relationships. *Journal of Adolescents, 35*, 243-248.

Dekovic, M. (1999). Risk and protective factors in the development of problem behavior during adolescence. *Journal of Youth and Adolescence*, *28*, 667-685.

Deković, M., Janssens, J. M. A. M., & Van As, N. M. C. (2003). Family predictors of antisocial behavior in adolescence. *Family Process*, *42*, 223-235.

Demuth, S., & Brown, S. L. (2004). Family structure, family processes and adolescent delinquency: The significance parental absence versus parental gender. *Journal of Research in Crime and Delinquency, 41*(1), 58-81.

Department of Health of South Africa (n.d.). Policy guidelines on child and adolescents mental health. Retrieved from http://www.info.gov.za/view/DownloadFileAction?id=94167.

Dodge, K. A., Garber, J. (1991). Emotion and social information processing. In J. Garber, & K. Dodge (Eds.). *The development of emotional regulation and dysregulation* (pp.159-181). Cambridge, England: Cambridge University Press.

Dozier, M., Stovall, K. C., Albus, K. E. (1999). Attachment and psychopathology in adulthood. In Muris, P., Meesters, C., & Van Den Berg, S. (2003). Internalising and externalising problems as correlates of self-reported attachment style and perceived parental rearing in normal adolescents. *Journal of Child and Family Studies, 12*, 171-183.

Duggal, S., Carlson, E. A., Sroufe, L. A., & Egeland, B. (2001) Depressive symptomatology in childhood and adolescence. *Development and Psychopathology, 13*(1),143–164.

Dunn, J., (1993). *From preschool to adolescence: a ten-year follow-up of siblings*. In Cambridge, presented to the Centre for Family Research, Cambridge.

DuRant, R. H., Smith, J. A., Kreiter, S. R., & Krowchuk, D. P. (1999). The relationship between early age of onset of initial substance use and engaging in multiple health risk behaviors among adolescents. *Archives of Pediatric and Adolescent Medicine, 153*(3), 286-291.

Durlak, J. A., & Wells, M (1997). Primary prevention mental health programs in children and adolescents: a meta-analytic review. *American Journal of Community Psychology, 25*(2), 115-152.

Eccles, J.S., Midgely, C., Wigfield, A., Buchanan, C.M., Reuman, D. Flanagan, C., and Mac Iver, D. (1993). Development during adolescence. The impact of stage-environment fit on young adolescents' experiences in school and in families. *American Psychologist*, 48, 2, 90-101.

Eisenberg, M. E., Neumark-Sztainer, D., Fulkerson, J. A., & Story,M. (2008). Family meals and substance use: is there a long-term protective association? *Journal of Adolescence Health, 43*(2),

Eisenberg, N., Cumberland, A., Spinrad, T. L., Fabes, R. A., Shepard, S. A., Reiser, M., et al. (2001). The relations of regulation and emotionality to children's externalizing and internalizing problem behaviour. *Child Development, 72*, 1112-1134.

Elgar, F. J., Craig, W., & Trites, S. (2013). Family dinners, communication and mental health in Canadian adolescents. *Journal of Adolescent Health, 52*, 433-438.

Elgin, J. (2006). Adult attachment and disordered eating to undergraduate men and women. Retrieved from

http://scholarworks.boisestate.edu/cgi/viewcontent.cgi?article=1048&context=mcnair_journal.

Emery, R. E. (1989). Interparental conflict and children of discord and divorce. *Psychological Bulletin, 92*, 310-330.

Epstein, N. B., & Bishop, D. S. (1981). Problem centred system therapy of the family. In F. Walsh (2003). *Normal Family Processes: Growing Diversity and Complexity* (3rd Ed.). New York/London: Guilford Press.

Epstein, N. B., Bishop, D. S., & Levin, S. (1978). The McMaster model of family functioning. *Journal of Marital and Family Counselling, 4*(4), 19-31.

Epstein, N. B., Bishop, D., Ryan, C., Miller, & Keitner, G., (2003). The McMaster Model: A view of healthy family functioning. In F. Walsh (Ed.), *Normal Family Processes* (pp. 581-607). New York: The Guilford Press.

Erel, O., & Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin, 118*(1), 108-132.

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.

Erkolahti, R., Ilonen, T., Saarijarvi, S., & Terho, P. (2003). Self-image and depressive symptoms among adolescents in non-clinical sample. *Nordic Journal of Psychiatry, 57*(6), 447-451.

Erol, N., Simsek, Z., & Munir, K. (2010). Mental health of adolescents reared in institutional care in Turkey: challenges and hope in the twenty-first century. *European Child and Adolescent Psychiatry, 19*(2), 113-124.

Essau, C. A. (2004). The association between family factors and depressive disorders in adolescents. *Journal of Youth and Adolescence*, *33*(5), 365-372.

Essau, C. A. (2006). *Child and adolescent psychopathology: Theoretical and clinical implications*. West Sussex: Routledge.

Essau, C. A. (2010). Comorbidity of substance use disorders among community-based and high-risk adolescents. *Psychiatry Research, 185*(1-2), 176-184.

Essau, C. A., Anastassiou-Hadjicharalambous, X., & Munoz, L. C. (2011). Psychometric properties of the Spencer Children's Anxiety Scale (SCAS) in Cypriot children and adolescents. *Child Psychiatry and Human Development*, *42*(5), 557-568.

Essau, C. A., Lewinsohn, P. M., Olaya, B., & Seeley, J. R. (2014). Anxiety disorders in adolescents and psychosocial outcomes at age 30. *Journal of Affective Disorders*. Retrieved from http://dx.doi.org/10.1016/j.jad.2013.12.033

Essau, C. A., Muris, P., & Ederer, E. M. (2002). Reliability and validity of Spence Children's Anxiety Scale and the Screen of Child Anxiety Related Emotional Disorders in German children. *Journal of Behavior, Therapy and Experimental Psychiatry, 33*, 1-18.

Essau, C. A., Olaya, B., Anastassiou-Hadjicharalambous, X., Pauli, G., Gilvarry, C., Bray, D., O'callaghan J., & Ollendick, T. H. (2012). Psychometric properties of Strengths and Difficulties Questionnaire from five European countries. *International Journal of Methods in Psychiatric Research, 21*(3), 232-245.

Fabrega, H., & Miller, B. (1995). A cultural analysis of adolescent psychopathology. *Journal of Adolescent Research, 10*(2), 197-226.

Fanti, K., Henrick, C., Brookmeyer, K., & Kuperminc, G. (2008). Toward a transactional model of parent-adolescent relationship quality and adolescent psychological adjustment. *Journal of Early Adolescence, 28*(2), 252-276.

Farmer, E. M. Z., Burns, B. J., Chapman, M. V., Phillips, S. D., Angold, A., & Costello, E. J., (2001). Use of mental health services by youth in contact with social services. *Social Service Review,* 75(4), 605–624.

Farrell, A. D., Erwin, E. H., Allison, K. W., et al. (2007). Problematic situations in the lives of urban African American middle school students: a qualitative study. *Journal of Research on Adolescence, 17*(2), 413-154.

Fatori, D., Bordin, I. A., Curto, B. M., & de Paula, C. S. (2013). Influence of psychosocial risk factors on the trajectory of mental health problems from childhood to adolescence: a longitudinal study. *BMC Psychiatry, 13*(31), 1-6.

Fendrich, M., Warner, V., & Weissman, M. M. (1990). Family risk factors, parental depression and psychopathology in offspring. *Developmental Psychology, 26*1, 40-50.

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods, 5*(1), 80-92.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed). London: SAGE Publications Ltd.

Fiese, B. H. (1996). Family context in pediatric psychology from a transactional perspective: Family rituals and stories as examples. *Journal of Pediatric Psychology*, *22,* 183–196.

Fiese, B. H., Wilder, J., & Bickham, N. L. (2000). The family context in developmental psychopathology. In A. J. Sameroff, M. Lewis, & S. M. Miller (Eds.) *Handbook of Developmental Psychopathology*. New York: Springer Science and Business Media Inc,

Fieser, B. H., & Schwartz, M. (2008). Reclaiming the family table: mealtimes and child health and well-being. *Social Policy Report, 12*, 1-19. Retrieved from http://www.yaleruddcenter.org/resources/upload/docs/what/reports/reclaimingfamilytable.pdf.

Fisak, B. J. & Grills-Taquechel, E. (2007). Parental modelling, reinforcement and information transfer: Risk factors in the development of child anxiety? *Clinical Child and Family Psychology, 10*(3), 213-231.

Fite, P. J., Rubens, S. L., Preddy, T. M., Raine, A., & Pardini, D. A. (2014). Reactive/Proactive aggression and the development of internalizing problems in males: the moderating effect of parent and peer relationships. *Aggressive Behavior, 40*, 69-78

Fitzpatrick, M. A. & Ritchie, L. D. (1993). Communication theory and the family: In P. Boss, W. Doherty, R. LaRossa, W. Schumm, & S. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp.565-585). New York: Plenum.

Fletcher, A. C., Steinberg, L., Darling, N. E., & Dornbusch, S. M. (1995). The company they keep: Impact of authoritative parenting in the adolescent's social network on individual adjustment and behavior. *Developmental Psychology, 31*(2), 300-310.

Flouri, E. (2010). Fathers' behavior and children psychopathology. *Clinical Psychology Review*, *30*, 363-369.

Ford, T., Goodman, R., & Meltzer, H. (2004). The relative importance of child, family, school and neighborhood correlates of childhood psychiatric disorder. *Social Psychiatry and Psychiatric Epidemiology, 39*, 487–496.

Forehand. R., & Wierson, M. (1993). The role of developmental factors in planning behavioral interventions for children: Disruptive behavior as an example. *Behavior Therapy, 24*, 117–141.

Frey, J., & Oppenheimer, K. (1990). Family dynamics and family psychopathology in child psychiatry outpatients. *Journal of Family Psychology, 5*(1), 46-59.

Frick, P. J., Christian, R. E., & Wooton, J. N. (1999). Age trends in association between parenting practices and conduct problems. *Behavior Modification, 23*(1), 106-128.

Frick, P. J., & Jackson, Y. K. (1993). Family functioning and childhood antisocial behavior: yet another reinterpretation. *Journal of Clinical Child Psychology, 22*(4), 410-419.

Friedmann, M. S., McDermut, W. H., Solomon, D. A., Ryan, C. E., Keitner, G. I., & Miller, I. W. (1997). Family functioning and mental illness: A comparison of psychiatric and nonclinical families. *Family Process, 36*(4), 357-367.

Friedrich, A. A., Mendez, L. M. R., & Mihalas, S. T. (2010). Gender as a factor in school-based mental health service delivery. *School Psychology Review, 39*(1), 122-136.

Frigerio, A., Rucci, P., Goodman, R., Ammaniti, M., Carlet, O., Cavolina, P., De Girolamo, G., et al., (2009). *European Child and Adolescent Psychiatry, 18*(4), 217-226.

Fristad, M. A., Verducci, J. S., Walters, K., & Young, M. E. (2009). Impact of multifamily psychoeducational psychotherapy in treating children aged 8 to 12 years with mood disorders. *Archives of General Psychiatry, 66*, 1013–1021.

Fumagalli, F., Molteni, R., Racagni, G., & Riva, M. A. (2007). Stress during development: impact on neuroplasticity and relevance to psychopathology. *Progess In Neurobiology, 81*(4), 197-217.

Gable, S., Belsky, J., & Crnic, K. (1992). Marriage, parenting and child development: Progress and prospects. *Journal of Family Psychology, 5*, 276-294.

Gallarin, M., & Alonson-Arbiol, I. (2012). Parenting practices, parental attachment and aggressiveness in adolescence: a predictive model. *Journal of Adolescence, 35*, 1601-1610.

Garland, A. F., Hough, R. L., McCabe, K. M., Yeh, M., Wood, P. A., & Aarons, G. A. (2001). Prevalence of psychiatric disorders in youths across five different sectors of care. *Journal of American Academy of Child and Adolescent Psychitry, 40,* 409-418.

Garnefski, N., & Diekstra, R. F. W. (1996). Perceived social support from family, school and peers: relationship with emotional and behavioral problems among adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 35*(12), 1657-1664.

Gaughan, M. (2011). Suicide. In A. Claveirole, & M. Gaughan, (Eds). *Understanding Children and Young People's Mental Health.* West Sussex: Wiley-Blackwell.

Gebeke, D., & Bushaw, K. (1991). Family communication and family meetings. *Work and Family Life Newsletter, 5*(4), 1-6. Retrieved from http://georgiadisaster.info/GeneralPublic/GP14StartingFamilyRecovery/Family%20Meetings.pdf.

Gehring, T. M., & Marti, D. (1993). The family system test: differences in perceptions of family structures between nonclinical and clinical children. *Journal of Child Psychology and Psychiatry, 34*(3), 363-377.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Chicago, IL: Aldine.

Goldstein, M. J. (1990). Family relations as risk factors for the onset and course of schizophrenia. In, Wenar, C., & Kerig, P., (2005). Developmental psychopathology: from infancy through adolescence (5th ed.). McGraw Hill: International Edition.

Goodman, R.. (1997). The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, *380*, 581-586.

Goodman, R. (1999). The extended version of the Strengths and Difficulties Questionnaire as Psychometric properties of the Strengths and Difficulties Questionnaire (SDQ). a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry, 40*, 791-801.

Goodman, R. (2001). *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 1337-1345.

Goodman, A., Fleitlich-Bilyk, B., Patel, V., & Goodman R. (2009). Child, family, school and community risk factors for poor mental health in Brazilian schoolchildren. *Journal of American Academy of Child and Adolescent Psychiatry, 34*(6), 1417-1424.

Goodman, R., Slobodskaya, H., & Knyazev, G. (2005). Russian child mental health – a cross-sectional study of prevalence and risk. *European Child and Adolescent Psychiatry, 14*(1), 28-33.

Gordon J., & Grant, G. (1997). *How we feel: an insight into the emotional world of teenagers*. London: Jessica Kingsley Publishers.

Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, Calif: Stanford University Press.

Gray, M., & Steinberg, L. (1999). Unpacking authoritative parenting: Reassessing a multidimensional construct. *Journal of Marriage and the Family, 61*, 574-587.

Grotevant, H. D., & Cooper, C. R. (1983). The role of family communication patterns in adolescent identity and role taking. Paper presented at the meeting of the Society for Research in Child Development, Detroit.

Gungor, D., & Borntein, M. H. (2010). Culture-general and specific associations of attachment avoidance and anxiety with perceived warmth and psychological control among Turk and Belgian adolescents. *Journal of Adolescence, 33*, 593-602.

Gutman, L. M., & Eccles, J. S. (2007). Stage-environment fit during adolescence: trajectories of family relations and adolescent outcomes. *Developmental Psychology, 43*(2), 522-537.

Guttman, H. A., Spector, R. M., Sigal, J. J., Epstein, N. B., & Rakoff, V. (1972). Gooding of affective expression in conjoint family therapy. *American Journal of Psychotherapy, 26*, 185-194.

Hackett, R., Hackett, L., Bhakta, P., & Gowers, S. (2009). The prevalence and associations of psychiatric disorders in children in Kerala, South India. In Fatori, D., Bordin, I. A., Curto, B. M., & de Paula, C. S. (2013). Influence of psychosocial risk factors on the trajectory of mental health problems from childhood to adolescence: a longitudinal study. *BMC Psychiatry, 13*(31), 1-6.

Hakim-Larson, J., & Essau, C. A. (1999). Protective factors. In Essau, C. A., & Petermann, F. (Eds). *Depressive disorders in children and adolescents: Epidemiology, risk factors and treatment* (pp.319-337). New Jersey: Jason Aronson Inc. Publishers.

Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion and education*. Englewood Cliffs. New Jersey: Prentice Hall.

Halpenny, A. M., Greene, S., & Hogan, D. (2008). Children's perspectives on coping and support following parental separation. *Child Care in Practice, 14*(3), 311-325.

Hamilton, C. E. (2000). Continuity and discontinuity of attachment from infancy through adolescents. *Child Development*, 71*(3)*, 690-694.

Hanson, R. F., & Spratt, E. G. (2000). Reactive attachment disorder: what we know about the disorder and implications for treatment. *Child Maltreatment, 5*(2), 137-145.

Hartung, C. M., & Widiger, T. A. (1998). Gender differences in the diagnosis of mental disorders: conclusions and controversies of the DSM-IV. *Psychological Bulletin, 123*, 260-278.

Haugland, S., Wold, B., Stevenson, J., Aaroe, L. E., & Woynarowska, B. (2001). Subjective health complaints in adolescence. A cross-national comparison of prevalence and dimensionality. *European Journal of Public Health, 11*(1), 4-10.

Hawthorne, J., Jessop, J., Pryor, J., & Richard, M. (2003). *Supporting children through family changes: A review of services*. London: Joseph Rowntree Foundation. Retrieved from http://www.jrf.org.uk/sites/files/jrf/1842630857.pdf.

Hazan, C., & Shaver, P. (1987). Conceptualizing romantic love as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.

Henry, C. S., Robinson, L. C., Neal, R. A., & Huey, E. L. (2006). Adolescent perceptions of overall family system functioning and parental behaviors. *Journal of Child and Family Studies, 15*(3), 319-329.

Hetherington, M. E., Cox, M. E., & Cox, R. (1979a). Family interaction and the social emotional and cognitive development of children following divorce. In V. Vaughn & T. Brazelton (Eds.), *The family: Setting priorities* (pp. 71−–87). New York: Science and Medicine.

Hetherington, M. E., Cox, M.E., & Cox, R. (1979b). Play and social interaction in children following divorce. *Journal of Social Issues*, *35*, 26–49.

Higgins, E. T., & Parson, J. E. (1983). Social cognition and the social life of the child: stages as subcultures. In E. T. Higgings, D. W. Ruble, & W. W. Hartup (Eds).

Social cognition and social behavior: developmental issues (pp.15-62) New York: Cambridge University Press.

Hill, J. P., Holmebeck, G. N. (1986). Attachment and autonomy during adolescence. In Whitehurst G. J. (Ed). *Annals of Child Development* (pp.145-189). Greenwich: JAI Press

Hinde, R. A. (1979). *Towards understanding relationships*. London: Academic Press.

Hindmarch, I. (2002). Beyond the monoamine hypothesis: mechanisms, molecules and methods. *European Psychiatry*, *17*(3), 294-299.

Hines, M. T. (2007). Adolescent adjustment to the middle school transition: The intersection of divorce and gender in review. *Research n Middle Level Education*, *31*(2) [online]. Retrieved from http://www.amle.org/portals/0/pdf/rmle/rmle_vol31_no2.pdf.

Hirschi, T. (1969). *Causes of delinquency*. Berkeley: University of California Press.

Hirschi, T. (1995). *The Family*. In Wilson, J. Q., & Petersilia, J. (2011). *Crime and Public Policy*. Oxford: Oxford University Press.

Ho, T. P., Leung, P. W., Luk, E. S., Taylor, E., Bacon-Shone, J., & Mak, F. L. (1996). Establishing the constructs of childhood behavioural disturbances in a Chinese population: A questionnaire study. *Journal of Abnormal Child Psychology*, *24*, 417-431.

Holmes, J. (1993). *John Bowlby and attachment theory*. London: Routledge.

Hopwood, C. J., & Grilo, C. M. (2010). Internalizing and externalizing personality dimensions and clinical problem in adolescents. *Child Psychiatry and Human Development, 41*, 398-408.

Horney, K. (1950). *Neurosis and human growth*. New York, NY: Norton.

Howitt, D. (2013). *Introduction to qualitative methods in psychology* (2nd ed.) Edinburgh: Pearson Education Limited.

Hudson, J. L., & Rapee, R. M. (2001). Parent-child interactions and anxiety disorders: an observational study. *Behavior, Research and Therapy, 39*, 1411-1417.

Hudson, J. L., & Rapee, R. M. (2002). Parent-child interaction in clinically anxious children and their siblings. *Journal of Clinical Child and Adolescent Psychology, 31*, 548-555.

Hughes, E., & Gullone, E. (2008). Internalizing problems and disorders in families of adolescents: a review of family systems literature. *Clinical Psychology Review, 28*, 92-117.

Hunter, F. T. (1985). Individual adolescents' perceptions of interactions with friends and parents. *Journal of Early Adolescence, 5*, 295-305.

Hyde, J. S., Mezulis, A. H., & Abramson, L. Y. (2008). The ABCs of depression: integrating affective, biological and cognitive models to explain the emergence of the gender difference in depression. *Psychological Review, 115*(2), 291-313.

Ivarsson, T., Granqvist, P., Gillberg, C., & Broberg, A. G. (2010). Attachment states of mind in adolescents with Obsessive–Compulsive Disorder and/or depressive

disorders: a controlled study. *European Child and Adolescent Psychiatry, 19*(11), 845-853.

Ivarsson, T., & Larsson, B. O. (2009). Sleep problems as reported by parents in Swedish children and adolescents with obsessive-compulsive disorder (OCD), child psychiatric outpatients and school children. *Nordic Journal of Psychiatry, 63*(6), 480-484.

Jacob, C. (1969). *Statistical power analysis for the behavioral sciences*. New York, NY: Academic Press.

Jessor, R. (1991). Risk behavior in adolescence: a psychosocial framework for understanding and action. *Journal of Adolescent health, 12*(8), 597-605.

Jessor, R., Donovan, J. E., & Costa, F. M. (1991). *Beyond adolescence: problem behavior and young adult development*. New York, NY: Cambridge University Press.

Johnson, J. G., Cohen, P., Kaser, S., Smailes, E., & Brook, J. S. (2001). Association of maladaptive parental behavior with psychiatric disorders among parents and their offspring. *Archives of General Psychiatry, 58*(5), 453-460.

Johhson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: a research paradigm whose time has come. *Educational Researcher, 33*(7), 14-26.

Johnson, R. B., & Turner, L. S. (2003). Data collection strategies in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 297-319). Thousand Oaks, CA: Sage.

Johnson, S., & Wolke, D. (2013). Behavioural outcomes and psychopathology during adolescence. *Early Human Development, 89*, 199-207.

Jose, P. E., & Ratcliffe, V. (2004). Stressors frequency and perceived intensity as predictors of internalizing symptoms: gender and age differences in adolescence. *New Zealand Journal of Psychology, 33*(3), 145-154.

Kaltiala-Heino, R., Marttunen, M., Rantanen, P., & Rimpela, M. (2003). Early puberty is associated with mental health problems in middle adolescence. *Social Science and Medicine, 57*(6), 1055-1064.

Kamphaus, R. W., & Frick, P. J. (1996). *Clinical assessment of child and adolescent personality and behavior*. Boston, MA: Allyn and Bacon.

Kandel, D. B., & Wu, P. (1995). Disentangling mother–child effects in the development of antisocial behavior. In J. McCord (Ed.). *Coercion and punishment in long term perspectives* (pp. 106–123). New York: Cambridge University Press.

Kapi, A., Veltsista, A., Sovio, U., Jarvelin, M. R., & Bakoula, C. (2007). Comparison of self-reported emotional and behavioural problems in adolescents from Greece and Finland. *Acta Paediatrica, 96*, 1174-1179.

Kas, M. J., Fernandes, C., Schalkwyk, L. C., & Collier, D. A. (2007). Genetics of behavioral domains across the neuropsychiatric spectrum of mice and men. *Molecular Psychiatry, 12*(4), 324-330.

Kaslow, N. J., Deering, C. G., & Racusia, G. R. (1994). Depressed children and their families. *Clinical Psychological Review, 14*, 39-59.

Katz, L. F., & Low, S. M. (2004). Marital violence, co-parenting and family-level processes in relation to children's adjustment. *Journal of Family Psychology*, *18*, 372-382.

Keijsers, L., Loeber, R., Branje, S., & Meeus, W. (2012). Parent-child relationships of boys in difference offending trajectories: a developmental perspective. The *Journal of Child Psychology and Psychiatry, 53*(12), 1222-1232.

Kenny, R., Dooley, B., & Fitzgerald, A., (2013). Interpersonal relationships and emotional distress in adolescence. *Journal of Adolescence, 36*, 351-360.

Kerig, P. K. (1996). Assessing links between interparental conflict and child adjustment: the conflicts and problem solving scales. *Journal of Family Psychology, 4*, 454-473.

Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current Opinion in Psychiatry, 20*(4), 359-364.

Kiser, L. J., Bennett, L., Heston, J., & Paavola, M. (2005). Family rituals and routine: comparison of clinical and non-clinical families. *Journal of Child and Family Studies, 14*(3), 357-372.

Kjelsberg, E., & Nygren, P. (2004). The prevalence of emotional and behavioural problems in institutionalized childcare clients. *Nordic Journal of Psychiatry, 58*(4), 319-325.

Kleinman, A. (1988). *Rethinking psychiatry: from culture category to personal experience*. In Parron, D. L. (1997). The fusion of cultural horizons: cultural

influences on the assessment of psychopathology on children. *Applied Developmental Science, 1*(3), 156-159.

Kliewer, W., & Murrelle, L. (2007). Risk and protective factors for adolescent substance use: findings from a study in selected Central American countries. In Fatori, D., Bordin, I. A., Curto, B. M., & de Paula, C. S. (2013). Influence of psychosocial risk factors on the trajectory of mental health problems from childhood to adolescence: a longitudinal study. *BMC Psychiatry, 13*(31), 1-6.

Kliewer, W., Richards, M. H., & Ozer, E. J. (2004). Protective factors in the relation between community violence exposure and adjustment in youth. *Journal of Clinical Child and Adolescent Psychology, 33*, 434-505.

Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation and representations of self and others. *Child Development, 59*(1), 135-146.

Kobak, R. R., Sudler, N., & Gamble, W. (1991). Attachment and depressive symptoms during adolescents: A developmental pathway analysis. *Development and Psychopathology, 3*, 461-474.

Kopko, K. (2007). *Parenting styles and adolescents*. Retrieved from http://www.parenting.cit.cornell.edu/documents/Parenting%20Styles%20and%20Adolescents.pdf .

Krueger, R. F. (1999). The structure of common mental disorders. *Archives of General Psychiatry, 56*(10), 921-926.

Kuperminc, G. P., Allen, J. P., & Arthur, M. W. (1996). Autonomy, relatedness, and male adolescent delinquency: Toward a multidimensional view of social competence. *Journal of Adolescent Research, 11*(4), 397–420.

Kwok, S. Y. C. L., & Shek, D. T. L. (2009). Social problem solving, family functioning and suicidal ideation among Chinese adolescents in Hong Kong. *Adolescence, 44*(174), 391-406.

La Grange, R. L., & White, H. R. (1985). Age differences in delinquency: A test of theory. *Criminology, 23*, 19-45. In Frick, P. J., Christian, R. E., & Wooton, J. N. (1999). Age trends in association between parenting practices and conduct problems. *Behavior Modification, 23*(1), 106-128.

La Greca, A. M., & Harrison, H. M. (2005). Adolescent peer relations, friendships, and romantic relationships: Do they predict social anxiety and depression? *Journal of Clinical Child and Adolescent Psychology, 34*(1), 49-61.

Lai Kwok, S. Y. C., & Shek, D. T. L. (2009). Social problem solving, family functioning and suicidal ideation among Chinese adolescents in Hong Kong. *Adolescence, 44*(174), 391-406.

Laird, R. D., Pettit, G. S., Bates, J. E., & Dodge, K. A. (2003). Parents' monitoring relevant knowledge and adolescents' delinquent behavior: Evidence of correlated developmental changes and reciprocal influences. *Child Development, 74*(3), 752–768.

Lacourse, E., Cote, S., Nagin, D. S., Vitaro, F., Brendgen, M., & Tremblay, R. E. (2002). A longitudinal-experimental approach to testing theories of antisocial behaviour development. *Development and Psychopathology, 14*, 909-924.

Landsverk, J., Garland, A. F., & Leslie, L. K. (2002). Mental health services for children reported to child protective services. In J. E. B. Myers, C. T. Hendrix, L. Berliner, C. Jenny, J. Briere, & T. Reid (Eds.). *APSAC Handbook on Child Maltreatment*, (2nd ed.) (pp. 487-507). Thousand Oaks, CA: Sage.

Larson, R., & Wilson, S. (2004). Adolescence across place and time: Globalization and the changing pathways to adulthood. In R. Lerner, & L. Steinberg (Eds). *Handbook of adolescent psychology* (2nd Ed.) (pp. 299-330) New York: Wiley.

Leadbeater, B. J., Blatt, S. J., & Quinlan, D. M. (1995). Gender-linked vulnerabilities to depressive symptoms, stress, and problem behaviors in adolescents. *Journal of Research on Adolescence, 5,* 1-29.

Leadbeater, B. J., Kuperminc, G. P., Blatt, S. J., & Hertzog, C. (1999). A multivariate model of gender differences in adolescents' internalizing and externalizing problems. *Developmental Psychology, 35*, 1268-1282.

Lee, E. J., & Bukowski, W. M., (2012). Co-development of internalizing and externalizing problem behaviours: causal direction and common vulnerability. *Journal of Adolescence, 35*, 713-729.

Lee, E. J., & Stone, S. I. (2012). Co-occurring internalizing and externalizing behavioural problems; mediating effect of negative self-concept. *Journal od Youth and Adolescence, 41*(6), 717-731.

Leve, L. D., Kim H. K., & Pears, K. C. (2005). Childhood temperament and family environment as predictors of internalizing and externalizing trajectories from 5 to 17. *Journal of Abnormal Child Psychology, 33*(5), 505-520.

Levin, K. A., & Currie, C. (2010). Family structure, mother-child communication, father-child communication and adolescent life satisfaction. *Health Education, 110*(3), 152-168.

Lewicka, M. (2005). Ways to make people active: The role of place attachment , cultural capital and neighbourhood ties. *Journal of Environmental Psychology, 25*, 381-395.

Laible, D. (2007). Attachment with parents and peers in late adolescence: Links with emotional competence and social behavior. *Personality and Individual Differences, 43*(5), 1185–1197.

Liable, D. J., Carlo, G., & Rafaelli, M. (2000). The differential relations of parent and peer attachment to adolescents adjustment. *Journal of Youth and Adolescents*, *29*(1), 45-59.

Lizardi, H., Klein, D. N., Ouimette, P. C., Riso, L. P., Anderson, R. L., & Donaldson, S. K. (1995). Reports of the childhood home environment in early-onset dysthymia and episodic major depression. *Journal of Abnormal Psychology, 104*, 132-139.

Loeber, R. (1982). The stability of antisocial and delinquent child behaviour: a review. *Child Development, 53*(6), 1431-1446.

Loeber, R., & Farrington, D. P. (1998). *Serious and violent juvenile offenders: Risk factors and successful interventions*. Beverly Hills, CA: Sage.

Loeber, R., Wung, P., Keenan, K., Giroux, B., Stouthamer-Loeber, M., Welmoet, B., et al. (1993). Developmental pathways in disruptive child behaviour. *Development and Psychopathology, 5,* 103-133.

Lyons-Ruth, K., Zeanah, C. H., & Benoit, D. (1996). Disorder and risk for disorder during infancy and toddlerhood. In E. J. Mash, & R. A. Barkley (2003). *Child Psychopathology* (2nd ed.) (pp. 457-491). New York: The Guildford Press.

Ma, C. Q., & Huebner, E. S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools, 45*(2), 177–190.

Maccoby, E. E, & Martin, J. A. (1983). Socialization in the context of the family: Parent–child interaction. In P. Mussen & E. M. Hetherington (Eds). *Handbook of child psychology, volume IV: socialization, personality, and social development*. (pp.1-101) New York, NY: Wiley.

Maenle, B., & Herringshaw, D. I. (2007). *Positive family communication*. Family and Consumer Sciences, Columbus: The Ohio State University. Retrieved from http://ohioline.osu.edu/hyg-fact/5000/pdf/Positive_Family_Communication.pdf.

Magaro, M. M., & Weisz, J. R. (2006). Perceived control mediates the relation between parental rejection and youth depression. *Journal of Abnormal Child Psychology, 34*, 867-876.

Main, M. (1990). Cross-cultural studies of attachment organizations: recent studies, changing methodologies and the concept of conditional strategies. *Human Development, 33*, 48-61.

Main, M., & Goldwyn, R. (1988). *An adult attachment classification system*. Berkeley: unpublished manuscript, University of California, Department of Psychology.

Manassis, K. (2012). *Problem solving in children psychotherapy: A skill based collaborate approach*. New York, NY: Guildford Press.

Manzi, C., Regalia, C., Pelucchi, S., & Fincham, F. D. (2012). Documenting different domains of promotion of autonomy in families. *Journal of Adolescence, 35*(2), 289-298.

Margolin, G. (1981). The reciprocal relationship between marital and child problem. In J. P. Vincent (Ed.), *Advances in family intervention, assessment, and theory* (pp. 13 1-1 82). Greenwich, CT: JAI Press.

Maschi, T., Morgen, K., Bradley, C., & Hatcher, S. S. (2008). Exploring gender differences on internalizing and externalizing problems among maltreated youth: Implications for social work action. *Child and Adolescent Social Work Journal, 25*, 531-547.

Mash, E J., & Barkley, R A. (2003). *Child psychopathology* (2nd ed). New York, NY: The Guildford Press.

McCann, J. B., James, A., Wilson, S., & Dunn, G. (1996). Prevalence of psychiatric disorders in young people in the care system. *British Medical Journal, 313*, 1529-1530.

McLanahan, S., & Sanderuf, G., (1994). *Growing Up with Single Parents*. Cambridge, MA: Harvard University Press.

McPherson, M., E. (2004). *Parenting Behaviour, Adolescent Depression, Alcohol Use, Tobacco Use and Academic Performance: A Path Model*. (Unpublished master's thesis). Virginia Polytechnic Institute and State University. USA. Retrieved from http://scholar.lib.vt.edu/theses/available/etd-08142004-194326/unrestricted/Thesis1.pdf.

McWey, L. M., Cui, M., & Pazdera, A. L. (2010). Changes in externalizing and internalizing problems of adolescents in foster care. *Journal of Marriage and Family, 72*, 1128-1140.

Mellon, R. C., & Moutavelis, A. G. (2007). Structure, developmental course, and correlates of children's anxiety disorder-related behavior in a Hellenic community sample. *Journal of Anxiety Disorders, 21*, 1-21.

Mellor, D. (2004). Furthering the use of the Strength and Difficulties Questionnaire: reliability with younger child respondents. *Psychological Assessment, 16*, 396-401.

Mellor, D. & Stokes, M. (2007). The factor structure of the Strength and Difficulties Questionnaire. *European Journal of Psychological Assessment, 23*, 105-112.

Meltzer, H., Gatward, R., Goodman, R., & Ford, T. (2000). *The mental health of children and adolescents in Great Britain*. Retrieved from http://www.dawba.info/abstracts/B-CAMHS99_original_survey_report.pdf.

Mendle, J., Turkheimer, E., & Emery, R. E. (2007). Detrimental psychological outcomes associated with early pubertal timing in adolescent girls. *Developmental Review, 27,* 151-171.

Mezzich, J. E., Kleinman, A., Fabrega, H., & Parron, D. L. (Eds) (1996). *Culture and psychiatric diagnosis: A DSM-IV perspective*. Washington, DC: American Psychitric Press.

Miklowitz, D. J. (1994). Family risk indicators in schizophrenia. In Wenar, C., & Kerig, P., (2005). Developmental psychopathology: from infancy through adolescence (5th ed.). McGraw Hill: International Edition.

Miles, J. N. V., & Shevlin, M. (2001). *Applying regression and correlation: a guide for students and researchers*. London: Sage.

Minuchin, S. (1974). Families and family therapy. In Wenar, C., & Kerig, P., (2005). Developmental psychopathology: from infancy through adolescence (5th ed.). McGraw Hill: International Edition.

Moffitt, T.E., Caspi, A., Rutter, M., & Silva, P.A. (2001). *Sex differences in antisocial behavior: Conduct disorder, delinquency, and violence in the Dunedin Longitudinal Study*. Cambridge, England: Cam- bridge University Press.

Monck, E., Grahan, P., & Richman, N. (1994). Adolescent girls: background factors in anxiety and depressive states. In, Pathak, R., Sharma, R. C., Parvan, U. C., Gupta, B. P., Ojha, R. K, & Goel, N. K. (2011). Behavioural and emotional problems in school going adolescents. *Australasian Medical Journal, 4*(1), 15-21.

Montemayor, R. (1982). The relationship between parent-adolescent conflict and the amount of time adolescents spend alone and with parents and peers. *Child Development, 53*(6),1512-1519.

Montemayor, R. (1983). Parents and adolescents in conflict: All families some of the time and some families most of the time. *Journal of Early Adolescence, 3*, 83-103.

Murad, D. S., Joung, I. M. A., Lenthe, F. J., Bengi-Arslan, L., & Crijnen, A. A. M., (2003). Predictors of self-reported problem behaviors in Turkish immigrant and Dutch adolescents in Netherlands. *Journal of Child Psychology and Psychiatry, 44*, 412-423.

Muris, P., Meesters, C., & Van Den Berg, S. (2003). Internalising and externalising problems as correlates of self-reported attachment style and perceived parental rearing in normal adolescents. *Journal of Child and Family Studies, 12*, 171-183.

Murris, P., Schmidt, H., & Merckelbach, H. (2000). Correlations among the two self-report questionnaires for measuring DSM defined anxiety disorder symptoms in children the Screen for Child Anxiety Related Emotional Disorders and the Spence Children's Anxiety Scale. *Personality and Individual Differences, 28*, 333-346.

Muris, P., Steerneman, P., Merckelbach, H., & Meesters, C. (1996). The role of parental fearfulness and modelling in children's fear. *Behaviour Research and Therapy, 34*, 265-268.

Muyibi, A. S., Ajayi, I. O., Irabor, A. E., & Lapido, M. M. A. (2010). Relationship between adolescents family function with socio-demographic characteristics and behaviour risk factors in a primary care facility. *African Journal of Primary Health & Family Medicine, 2*(1). Retrieved from http://www.phcfm.org/index.php/phcfm/article/view/177/161.

Nasser, F., & Wisenbaker J. (2003). A Monte Carlo study investigating the impact of item parcelling on measures of fit in confirmatory factor analysis. *Educational and Psychological Measurement, 63*, 729–757.

National Center of Addiction and Substance Abuse (2007). The importance of family dinners IV. [Online]. Retrieved from http://www.casacolumbia.org/templates/PressReleases.aspx?articleid=502&zoneid=65.

National Institutes of Health. (1997). *Progressive brain changes detected in childhood onset schizophrenia* (Press Release). Retrieved from http://www.nih.gov/news/pr/oct97/nimh-14.htm.

Neel, E. U., Jay, S., & Litt, I. F. (1985). The relationship of self-concept and autonomy to oral contraceptive compliance among adolescent females. *Journal of Adolescent Health Care, 6*(6), 445-447.

Newton-Howes, G. (2004). What happens when children with attention deficit/hyperactivity disorder grow up? *Journal of Royal Society of Medicine, 97*(11), 531-535.

Nolan, S. A., Flynn, C., & Garber, J. (2003). Prospective relations between rejection and depression in young adolescents. *Journal of Personality and Social Psychology, 85*(4), 745-755.

Nolen-Hoeksema, S., & Girgus, J. S. (1994). The emergence of gender differences in depression during adolescence. *Psychological Bulletin, 115*(3), 424-443.

Noller, P., & Callan, V. (1991). *The Adolescent in the Family*. London: Routledge.

Nomura, Y., Wickramaratne, P. J., Warner, V., Mufson, L., & Weissman, M. M. (2002). Cognitive-behaviour therapy for children with anxiety disorders in a clinical setting: No additional effect of a cognitive parent training. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*, 1270-1278.

Nye, F. I. (1958). *Family relationships and delinquent behavior*. New York, NY: John Wiley and Sons.

O'Byrne, K. K., Haddock, C. H., Poston, W. S. C. & Mid America Heart Institute, (2002). Parenting Style and Adolescent Smoking. *Journal of Adolescent Health, 30*, 418-425.

Olson, D. H. (2000). Circumplex model of family systems. *Journal of Family Therapy, 22*(2), 144-167.

Olson, D. H. (2011). FACES IV the Circumplex model: validation study. *Journal of Marital and Family Therapy*, *3*(1), 64-80.

Olson, D. H., & Gorall, D. M. (2003). Circumplex model of marital and family systems. In F. Walsh (Ed.) *Normal family processes: growing diversity and complexity* (3rd ed.) (pp. 514-547). New York/London: Guilford Press.

Olson, D. H., Gorall, D. M., & Tiesel, J. (2006). *FACES IV package administration*. Minneapolis, MN: Life Innovation Inc.

Olson, D. H., Russel, C. S., & Sprenkle, D. H. (1983). Circumplex model of marital and family systems:VI. Theoretical update. *Family Process, 22*(1), 69-83.

Olson, D. H., Russell, C. S., & Sprenkle, D. H. (1989). *Circumplex model: systematic assessemnt and treatment of families*. New York: Hayworth Press.

Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Cambridge: MA: Blackwell.

Orbach, S. (2006). The body-mind of the suicidal person. In Claveirole, A., & Gaughan, M., (2011). *Understanding Children and Young People's Mental Health.* West Sussex: Wiley-Blackwell.

Osborne, J. W. & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Prectical Assessment, Research and Evaluation, 8*(2), 1-5.

Osgood, D. W., Wilson, J. K., O'Malley, O. M., Bachman, J. G., & Johnston, L. D. (1996). Routine activities and individual deviant behaviors. *American Sociological Review, 61*, 635-655.

Pace, U., & Zappulla, C. (2011). Problem behaviors in adolescence: the opposite role played by insecure attachment and commitment strength. *Journal of Child and Family Studies, 20*, 854-862.

Page, T . F. (2001). Attachment themes in the family narratives of preschool children: a qualitative analysis. *Child and Adolescent Social Work Journal, 18*(5), 353-375.

Paikoff, R. L., & Collins, W. A. (1989). *Agreement in parents' and adolescents; perceptions: An analysis of a cognitive factor in relationships and relationship changes*. In Collins, W., & Russell, G. (1991). Mother-child and father-child relationships in middle adolescents: A developmental analysis. *Developmental Review, 11*, 99-136.

Paquette, J. A., & Underwood, M. K. (1999). Gender differences in young adolescents' experiences of peer victimization: Social and physical aggression. *Merrill-Palmer Quarterly, 45*(2), 242-266.

Parker, G. (1990). The parental bonding instrument: A debate of research. *Social Psychiatry and Psychiatric Epidemiology, 25*(6), 281-282.

Parron, D. L. (1997). The fusion of cultural horizons: cultural influences on the assessment of psychopathology on children. *Applied Developmental Science, 1*(3), 156-159.

Parvizy, S., & Ahmadi, F. (2009). A qualitative study on health and family. *Mental Health in Family Medicine, 6*, 163-172.

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *Lancet, 369*, 1302-1313.

Pathak, R., Sharma, R. C., Parvan, U. C., Gupta, B. P., Ojha, R. K, & Goel, N. K. (2011). Behavioural and emotional problems in school going adolescents. *Australasian Medical Journal, 4*(1), 15-21.

Patterson, G. R. (1982). *Coercive family process*. Eugene: Castalia.

Patterson, G. R. (1986). Performance models for antisocial boys. *American Psychologist, 41,* 432-444.

Patterson, G. R., & Capaldi, D. M. (1991). Antisocial parents: unskilled and unavailable. In Aggleton, P., Hurry, J., & Warwick, I. (2000). *Young people and mental health*. Chichester, UK: Willey.

Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist, 44*, 329-335.

Patterson, G. R., & Dishion, T. J. (1985). Contributions of families and peers to delinquency. *Criminology, 23*, 63–79.

Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Antisocial boys*. Eugene, OR: Castalia.

Pearce, J. (2000). Emotional disorders in young people. In P. Aggleton, J. Hurry, & I. Warwick (Eds) (pp.47-72). *Young people and mental health*. Chichester, UK: Willey.

Peer, J. E., Rothmann, T. L., Penrod, R. D., Penn, D. L., & Spaulding, W. D. (2004). Social cognitive bias and neurocognitive deficit in paranoid symptoms: evidence for an interaction effect and changes during treatment. *Schizophrenia Research, 71*(2-3), 463-471.

Peleg-Popko, O. (2002). Children's test anxiety and family interaction patterns. *Anxiety, Stress and Coping: An International Journal*, *52*(1), 1-10.

Peleg-Popko, O., & Dar, R. (2001). Marital quality, family patterns and children's fears and social anxiety. *Contemporary Family Therapy*, 23(4), 465-487.

Pepler, D. J., & Craig, W. M. (1995) A peak behind the fence: naturalistic observations of aggressive children with remote audiovisual recording. *Developmental Psychology, 31*, 548-53.

Phythian, K., Keane, C., & Krull, C. K. C. (2008). Family structure and parental behaviour: Identifying the sources of adolescent self-control. *Western Criminology Review, 9*(2), 73-87.

Piaget, J. (1932). *The moral judgment of the child*. Glencoe: Free Press

Pidgeon, N., & Henwood, K. (1996). Grounded theory: practical implementation. In J. T. E. Richardson (Ed). *Handbook of qualitative research methods*, (pp. 86-101) Leicester, England: BPS Books.

Pilgrim, D., & Rogers, A. (2010). *A sociology of mental health and illness*. Milton Keynes: Open University Press.

Pine, D. S., Cohen, P., Gurley, D., Brook, J., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiarty, 55*, 56-64.

Pipher, M. (1994). *Reviving Ophella: Saving the selves of adolescents girls*. New York: Penguins Books Ltd.

Polce-Lynch, M., Myers, B. J., Kilmartin, C. T., Forssmann-Falck, R., and Kliewer, W. (1998). Gender and age patterns in emotional expression, body image, and self-esteem: A qualitative analysis. *Sex Roles, 38*, 1025-1050.

Polit, D. F., & Beck, C. T. (2006). *Nursing Research, Methods, Appraisal, and Utilization* (6th ed.). Philadelphia: Lippincott.

Potter, J., & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. London: Sage

Prinstein, M. J., & La Greca, A. M. (2004). Childhood peer rejection and aggression as predictors of adolescent girls' externalizing and health risk behaviors: A 6- year longitudinal study. *Journal of Consulting and Clinical Psychology, 72*(1), 103–112.

Proctor, L. J. (2006). Children growing in a violent community: The role of the family. *Journal of Aggression and Violent Behavior, 11*, 558-576.

Punamaki, R. L., Qouta, S., & El-Sarraji, E. (1997). Models of traumatic experiences and children's adjustment: The roles of perceived parenting and the children's own resources and activity. *Child Development*, *64*, 718-728.

Punch, K. F. (2014). *Introduction to social research: quantitative and qualitative approaches* (3rd ed.). London: Sage Publications Ltd.

Quay, H. C. (1986). Classification. In H. C. Quay & J. S. Werry (Eds.), *Psychopathological disorders of childhood* (3rd ed.). New York: Wiley.

Rapee, R. M. (1997). Potential role of childrearing practices in the development of anxiety and depression. *Clinical Psychology Review, 17*, 47-67.

Ravens-Sieberer, U., Wille, N., Erhart, M., Bettge, S., Wittchen, H. U., Rothenberger, A., Herpertz-Dahlmann, B., et al., (2008). Prevalence of mental health problems in Germany: results of the BELLA study with the National Health Interview and Examination Survey. *European Child and Adolescent Psychiatry*, *17*(1), 22-33.

Reid, J. B., Patterson, G. R., & Snyder, J. J. (2002). *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention*. In Wenar, C., & Kerig, P., (2005). Developmental psychopathology: from infancy through adolescence (5th ed.). McGraw Hill: International Edition.

Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, *128*(2), 330-366.

Rescorla, L., Achenbach, T., Ivanova, M. Y., Dumenci, L., Almqvist, F., Bilenberg, N., Bird, H., et al. (2007). Behavioral and emotional problems reported by parents

of children ages 6 to 16 in 31 societies. *Journal of Emotional and Behavioral Problems*, *15*(3), 130-142.

Resnick, M. D. (2000). Protective factors, resiliency, and healthy youth development. *Adolescent Medicine, 11*(1), 157-164).

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., et al. (1997). Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. *Journal of American Medical Association, 278*, 823-832.

Resnsick, M. D., Harris, L. J., & Blum, R. W. (1993). The impact of caring and connectedness on adolescent health and well-being. *Journal of Pediatrics and Child Health, 29*(1), s3-s9.

Richter, L. M. (2006). Studying adolescence. *Science, 312*, 1902-1905.

Riesch, S. K., Jacobson, G., Sawdey, L., Anderson, J., & Henriques, J. (2008). Suicide ideation among later elementary school- aged youth. *Journal of Psychiatric and Mental Health Nursing, 15*, 263–277.

Riessman, C.K. (1994). *Narrative Analysis*. Newbury Park, CA: Sage.

Rivero, N., Martinez-Pampliega, A., & Olson, D. H. (2010). Spanish adaptation of the FACES IV questionnaire: Psychometric Characteristics. *The Family journal: Counselling and Therapy of Couples and Families*, *18*(3), 288-296.

Roberts, R. E., Attkisson, C. C., & Rosenblatt, A. (1998). Prevalence of psychopathology among children and adolescents. *The American Journal of Psychiatry, 155*(6), 715-725.

Robins, L .N. (1966). *Deviant children grown up: A sociological and psychiatric study of sociopathic personality*. Baltimore: The Williams and Wilkins Company.

Robinson, N. S., Garber, J., & Hilsman, R. (1995). Cognitions and stress: direct and moderating effects on depressive versus externalizing symptoms during the junior high school transition. *Journal of Abnormal Psychology, 104*(3), 453-63.

Roelofs, J., Meesters, C., Huurne, M., Bamelis, L., & Muris, P. (2006). On the links between attachment styles, parental rearing behaviors and internalizing and externalizing problems in non-clinical children. *Journal of Child and Family Studies, 15*(3), 331-344.

Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.

Rohde, P., Lewinsohn, P. M., Klein, D. N., Seeley, J. R., & Gau, J. M. (2013). Key characteristics of major depressive disorder occurring in childhood, adolescence, emerging adulthood, and adulthood. *Child Psychological Science, 1*(1), 41-53.

Ronan, G. F., Dreer, L. E., & Gerhart, J. I. (2008). Adolescent psychiatric patients and their parents: comparison with a non-clinical cohort. *International Journal of Adolescent Medicine and Health, 20*(4), 405-418.

Rosenberg, M. (1965). *Society and adolescent self-image*. Princeton, NJ: Princeton University.

Rosenstein, D. S., & Horowitz, H. A. (1996). Adolescent and psychopathology. *Journal of Consulting and Clinical Psychology*, *64*, 244-253.

Rothbart, M., & Ahabi, S. (1994). Temperament and the development of personality. *Journal of Abnormal Psychology*, *103*, 55-66.

Rothbart, M., & Bates, J. (1998). *Temperament*. In Damon, W., Lerner, R. M., & Eisenberg, N. (2006). *Handbook of child psychology social emotional and personality development*. New Jersey: Willey.

Rothbaum, F., & Weisz, J. R. (1994). Parental caregiving and child externalizing behavior in nonclinical samples: A meta-analysis. *Psychological Bulletin, 116,* 55–74.

Roussos, A., Francis, K., Zoubou, V., Kiprianos, S., Prokopiou, A., & Richardson, C. (2001). The standardization of Achenbach's Youth Self Report in Greece in a national sample og high school students. *European Child and Adolescent Psychiatry, 10*, 47-53.

Roustis, C., Chaix, B., & Chauvin, P. (2007). Family breakup and adolescents' psychosocial maladjustment: public health implication of family disruptions. *Pediatrics*, *120*, 984-991.

Rowa, K., Kerig, P. K., & Geller, J. (2001). The family and anorexia: examining parent-child boundary problem. *European Eating Disorders Review, 9*, 97-114.

Rubin, K. H., Burgess, K. B., & Hastings, P. D. (2002). Stability and social behaviour consequences of toddlers' inhibited temperament and parental behaviours. *Child Development, 73*, 483-495.

Russell, S., & Bakken, R. J. (2002). *Development of autonomy in adolescence*. Retrieved from http://www.ianrpubs.unl.edu/epublic/archive/g1449/build/g1449.pdf

Rutter, M. (2000). Psychological influences: critiques, findings and research needs. *Development and Psychopathology, 12*(3), 375-405.

Sander, J. B., & McCarty, C. A. (2005). Youth depression in the family context: family risk factors and models of treatment. *Clinical Child and Family Psychology Review*, *8*, 203-219.

Sandoval, M., Lemos, S., & Vallejo, G. (2006). Self-reported competences and problems in Spanish adolescents: a normative study of YSR. *Psicothema, 18*(4), 804-809.

Santa_Barbara, J., Woodward, C. A., Levis, S., Goodman, J. T., Streiner, D., & Epstein, N. B. (1979). The McMaster family therapy outcome study: an overview of methods and results. *Contemporary Family Therapy, 1*(4), 304-323.

Satir, V. (n.d.). *Virginia Satir*. Retrieved from http://www.whale.to/a/satir_h.html

Savin-Willliams, R. C., & Small, S. A. (1986). The timing of puberty and its relationships to adolescent and parent perceptions of family interactions. *Developmental Psychology, 22*, 342-347.

Scales, P. (1997). The role of family support programs in building developmental assets among young adolescents: a national survey of services and staff training needs. *Child Welfare, 76*(5), 611-635.

Scheuren, F. (1980). What is a survey? Retrieved from https://www.whatisasurvey.info/overview.htm.

Schrodt, P., Ledbetter, A. M., & Orht, J. K. (2007). Parental confirmation and affection as mediators of family communication patterns and children's mental well-being. *Journal of Family Communication, 7*(1), 23-46.

Schumacker, R. E., & Lomax, R. G. (1996). *A Beginner's Guide to Structural Equation Modeling*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.

Seidman, E., & French, S. (2004). Developmental trajectories and ecological transitions: A two step procedure to aid in the choice of prevention and promotion interventions. *Developmental Psychopathology, 16*, 1141-1159.

Shek, D. T. L. (1998). A longitudinal study on the relations between parent – adolescent conflict and adolescent psychological well-being. *The Journal of Genetic Psychology, 159*(1), 53-67.

Sheldon, K. M., Elliot, A., Ryan, R. M., Chirkov, V. I., Kim, Y., Wu, C., et al. (2004). Self-concordance and subjective well-being in four cultures. *Journal of Cross-Cultural Psychology, 35*(2), 209-223.

Shi, L. (2003). The association between adult attachment styles and conflict resolution in romantic relationships. *The American Journal of Family Therapy, 31*, 143-157.

Silk, J. S., Steinberg, L., & Morris, A. S. (2003). Adolescents' emotion regulation in daily life: Links to depressive symptoms and problems behavior. *Child Development, 74*(6), 1869-1880.

Silverberg, S., & Steinberg, L. (1987). Adolescent autonomy, parent-adolescent conflict and parental well-being. *Journal of Youth and Adolescent, 16*, 293-312.

Simmel., C., Barth, R., & Brooks, D. (2007). Adopted foster youths' psychosocial functioning: a longitudinal perspective. *Child and Family Social Work, 12*, 336-348.

Siqueland, L., Kendall, P. C., & Steinberg, L. (1996). Anxiety in childen: Percievd family environmenr and observed family interactions. *Journal of Clinical Child Psychology, 25*(2), 225-237.

Skapouli, E. (2009). Transforming the label of "whore": teenage girls' negotiation of local and global gender ideologies in Cyprus. *Pragmatics, 19*(1), 85-101.

Soenens, B., & Beyers, W. (2012). The cross-cultural significance of control and autonomy in parent-adolescent relationships. *Journal of Adolescents, 35*, 243-248.

Spear, H. J., & Kulbok, P. (2004). Autonomy and adolescence: A concept analysis. *Public Health Nursing, 21*(2), 144-152.

Spear, L. P. (2000). The adolescent brain and age-related behavioural manifestations. *Neuroscience and Biobehavioral Reviews, 24*, 417-463.

Spence, S. H. (1997). Structure of anxiety symptoms among children: A confirmatory factor-analytic study. *Journal of Abnormal Psychology, 106*(2), 280-297.

Spence, S. H. (1998). A measure of anxiety symptoms among children. *Behaviour Research and Therapy, 36*(5), 545-566.

Spence, S. H., Barrett, P. M., & Turner, C. M. (2003). Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *Journal of Anxiety Disorders*, *17*(6), 605-625.

Spencer, N. (2005), "Does material disadvantage explain the increased risk of adverse health, educational and behavioural outcomes among children in lone parent

households in Britain? A cross sectional study", *Journal of Epidemiology and Community Health, 59*(2), 152-157.

SPSS Statistics (Version 19) [Computer Software]. Chicago, IL: IBM

St George, S. M., & Wilson, D. K. (2012). A qualitative study for understanding family and peer influences on obesity-related health behaviours in low-income African-American adolescents. *Childhood Obesity, 8*(5), 466-476.

Stangor, C. (2004). *Research methods for the behavioural sciences* (2nd ed). Boston: Houghton Mifflin Company.

Stavrinides, P., Paradeisiotou, A., Tziogouros, C., & Lazarou, C. (2010). Prevalence of bullying among Cyprus elementary and high school students. *International Journal of Viiolence and School, 11*, 114-128.

Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In Feldman, S. S., & Elliott, G. R., (Eds.), *At the threshold: The developing adolescent* (pp. 255-276). Cambridge, MA: Harvard University Press.

Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence, 11*(1), 1-19.

Steinhausen, H. C. (2006). Developmental psychopathology in adolescence: findings from a Swiss study – the NAPE lecture 2005. *Acta Psychiatrica Scandinavica, 13*(1), 6-12.

Steinhausen, H. C., Metzke, C. W., Meier, M., & Kannenberg, R. (1998). Prevalence of child and adolescent psychiatric disorders: the Zurich Epidemiological Study. *Acta Psychiatrica Scandinavica*, *98*, 262 – 272.

Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.) NJ: Lawrence Erlbaum Publish.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York, NY: Norron.

Susman, E. J., Dorn, E. D., Inoff-Germain, G., Nottelman, E. D., & Chrousos, G. P. (1997). Cortisol reactivity, distress behavior, and behavioral and psychological problems in young adolescents: a longitudinal perspective. *Journal of Research on Adolescence, 7*, 81-105.

Sawyer, M. G., Arney, F. M., Baghurst, P. A., Clark, J. J., Craetz, B. W., Kosky, R. J., Nurcombe, B., et al. (2008). The mental health young people in Australia: key findings from the child and adolescent component of the national survey of mental health and well-being. *Australian and New Zealand Journal of Psychiatry*, *35*(6) 806-814.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4 ed.). London: Allyn and Bacon.

Tabachnick, B. G. & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.

Tampli, A., & Goodyet, I. M. (2001). Family functioning in adolescents at high and low risk for major depressive disorder. *European Child Adolescent Psychiatry*, *10*(3), 170-179.

Tamplin, A., Goodyet, I. M., & Herbet, J. (1998). Family functioning and parent general health in families of adolescents with major depressed disorders. *Journal of Affective Disorders*, *48*(1), 1-13.

Talwar, P. (1998). The family and peer group influences in aggression. *Indian Journal of Psychiatry, 40*(4), 346-349.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks: Sage.

Tashakkori, A., & Teddlie, C. (2003a). *Handbook of Mixed Methods in Social & Behavioral Research*. Thousand Oaks: Sage.

Taylor, S. E., Repetti, R. L., & Seeman, T. (1997). Health psychology: What is an unhealthy environment and how does it get under the skin? *Annual Review of Psychology, 48*, 411-447.

Thames, B. J., & Thomason, D. J. (1998). *Building family strengths communications*. Retrieved from http://www.clemson.edu/psapublishing/pages/fyd/fl521.pdf.

Theobald, D., & Farrington, D. P. (2012). Child and adolescent predictors of male intimate partner violence. *The Journal of Child Psychology and Psychiatry, 53*(12), 1242-1249.

Thomas, A., Chess, S., & Birch, H. G. (1968). *Temperament and behaviour disorders in children*. New York, NY: New York University Press.

Thurston, I. B., Curley, J., Fields, S., Kamboukos, D., Rojas, A., & Phares, V. (2008). How nonclinical are community samples? *Journal of Community Psychology, 36*(4), 411-420.

Tornaritis, M. J., Philippou, E., Hadjigeorgiou, C., Kourides, Y. A., Panayi, A., & Savva, S. C. (2014). A study of the dietary intake of Cypriot children and adolescents aged 6-18 years and the association of mother's educational satus

and children's weight status on adherence to nutritional recommendations. *BMC Public Health, 14*(13), 1-11.

Tracy, J. L., & Robins, R. W. (2003). ''Death of a (narcissistic) salesman'': An integrative model of fragile self-esteem. *Psychological Inquiry, 14*, 57–62.

Trangkasombat, U. (2006). Family functioning in the families of psychiatric patients: a comparison with non-clinical families. *Journal of Medical Association of Thailand, 89*(11), 1946-1953.

Trzesniewski, K. H., Donnellan, M. B., Moffitt, T. E., Robins, R. W., Poulton, R., & Caspi, A. (2006). Low self-esteem during adolescence predicts poor health, criminal behavior, and limited economic prospects during adulthood. *Developmental Psychology, 42*(2), 381-390.

Tsiantis, G. (2010). Δραστηριότητες στην ταξη για την προληψη του εκφοβισμού και της βίας μεταξύ των μαθητών (Classroom activities to prevent bullying and violence among students: Teachers manual in primary education). Αθήνα, Ελλάδα: Εταιρεία ψυχοκοινωνιής υγείας του παιδείου και του εφήβου.

Tucker, P. (2009). Intervention is of value in improving outcomes. *Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists, 17*(4), 291-294. In Claveirole, A., & Gaughan, M., (2011). *Understanding Children and Young People's Mental Health.* West Sussex: Wiley-Blackwell.

UNICEF, (2011). *The stage of the world's children 2011: Adolescence an age of opportunity*. Retrieved from http://www.unicef.org/sowc2011/pdfs/SOWC-2011-Main-Report_EN_02092011.pdf

U.S. Department of Health and Human Services. (1999). Mental Health: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services.

Ustun, B., & Kennedy, C. (2009). What is functional impairment? Disentangling disability from clinical significance. *World Psychiatry, 8*, 82-85.

Van Lang, N. D. J., Ferdinand, R. F., Oldehinkel, A. J., Ormel, J., & Verhulst, F. C. (2005). Concurrent validity of the DSM-IV scales Affective Disorders and Anxiety Disorders of the Youth Self-Report. *Behaviour Research and Therapy*, *43*, 1485 – 1494.

Van Voorhis, P., Francis, C., Richard, M., & Connie, G. (1988). The impact of family structure and quality on delinquency: a comparative assessment of structural and functional factors. *Criminology, 26*(2), 235-261.

Verhulst, F. C., Achenbach, T. M., Van der Ende, M. S., Erol, N., Lambert, M. C., Leug, L. W. L., et al. (2003). Comparisons of problems reported by youths from seven countries. *American Journal of Psychiatry, 160*, 1479-1485.

Verhulst, F. C., Van der Ende, J., Ferdinand, R. F., & Kasius, M. C. (1997). The prevalence of DSM-III-R diagnoses in a national sample of Dutch adolescents. *Archives of General Psychiatry, 54*, 329-336.

Verhulst, F. C., & Koot, H. M. (1995). *The Epidemiology of child and adolescent psychopathology*. London: Oxford University Press

Vernberg, E. M., Abwender, D. A., Ewell, K. K., & Beery, S. H. (1992). Social anxiety and peer relationships in early adolescence: A prospective analysis. *Journal of Clinical Child Psychology, 21,* 189–196.

Vicente, B., Saldivia, S., de la Barra, F., Kohn, R., Pihan, R., Valdivia, M., Rioseco, P., & Melipillan, R. (2012). Prevalence of child and adolescent disorders in Chile: a community epidemiological study. *Journal of Child Psychology and Psychiatry, 53*(10), 1026-1035.

Vijayakumar, L., John, S., Pirkis, J., & Whiteford H. (2005). Suicide in developing countries – risk factors. In Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *Lancet, 369*, 1302-1313.

Visser, J. H., van der Ende, J., Koot H. M., & Verhulst, F. (2003). Predicting change in psychopathology in youth referred to mental health services in childhood or adolescence. *Journal of Child Psychology and Psychiatry, 44*(4), 509-519.

Wallin, D. J. (2007). *Attachment in Psychotherapy*. New York: Guildford Press.

Wallis, P., & Steele, H. (2001). Attachment representations in adolescence: further evidence for psychiatric residential settings. *Attachment and Human Development, 3*(3), 259-268.

Walsh, F. (2003). *Normal family processes: growing diversity and complexity* (3rd Edition.). New York/London: Guilford Press.

Walsh, T., McClellan, J. M., McCarthy, S. E., Addington, A. M., Pierce, S. B., Cooper, G. M., & Nord, A. S., et al. (2008). Rare structural variants disrupt multiple genes in neurodevelopmental pathways in schizophrenia. *Science, 320*(5875), 539-543.

Wanger, B. M. (1997). Family risk factor for child and adolescent suicidal behvaviour. *Psychological Bulletin, 121*, 246-298.

Wargo, E. (2007). Adolescents and risk: Helping young people make better choices. *ACT for Youth Centre of Excellence: Research Facts and Findings*. Retrieved from http://www.actforyouth.net/documents/AdolescentRisk_Sept07.pdf.

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development*, *71*(3), 684-689.

Waters, E., Weinfield, N. S., & Hamilton, C. E. (2000). The stability of attachment security from infancy to adolescence and early adulthood: General Discussion. *Child Development, 71*(3), 703-706.

Weinfeld, N. S., Sroufe, L. A., & Egelund, B. (2000). Attachment from infancy to early adulthood in a high-risk sample: Continuity and discontinuity, and their correlates. *Child Development, 71*(3), 695-702.

Weiss, R. S. *Marital Separation*. New York, NY: Basic Books.

Weiss, S. J., Goebel, P., Page, A., Wilson, P., & Warda, M. (1999). The impact of cultural and familial context on behavioral and emotional problems of preschool Latino children. *Child Psychiatry and Human Development, 29*, 287-301.

Weisz, J.R. & Eastman, K.L. (1995). Cross-cultural research on child and adolescent psychopathology. In F. C. Verhulst & H. M. Koot (Eds.), *The epidemiology of child and adolescent psychopathology* (pp. 42-65). Oxford: Oxford University Press.

Weisz, J. R., Weiss, B., Suwanlert, S., & Chaiyasit, W. (2006). Culture and youth psychopathology: Testing the syndromal sensitivity model in Thai and

American adolescents. *Journal of Consulting and Clinical Psychology, 74*, 1098-1107.

Wenar, C., & Kerig, P., (2005). Developmental psychopathology: from infancy through adolescence (5th ed.). McGraw Hill: International Edition.

Werry, J. S. (1985). ICD 9 & DSM III classification for the clinician. *Journal of Child Psycholy and Psychiatry, 26*(1), 1-6.

William, R., & Kerfoot, M. (2005). *Child and adolescent mental health service*. Oxford: Oxford University Press.

Williams, G. C., Cox, E. M., Kouides, R., & Deci, E. L. (1999). Presenting the facts about smoking to adolescents: Effects of an autonomy-supportive style. *Archives of Pediatrics & Adolescent Medicine*. *153*(9), 959-964.

Williams, R., Anderson, J., McGee, R., & Silva, P. A. (1990). Risk factors for behavioural and emotional disorders in preadolescent children. *Journal of American Academy of Child and Adolescent Psychiatry, 29*, 413-419.

Willig, C. (2013). *Introducing qualitative research in psychology* (3rd ed.). Mc Graw-Hill: Open University Press.

Wilson, J. Q., & Petersilia, J. (2011). *Crime and Public Policy*. Oxford: Oxford Univeristy Press

Windle, M (1992). A longitudinal study of stress buffering for adolescent problem behaviours. In Levin, K. A., & Currie, C. (2010). Family structure, mother-child communication, father-child communication and adolescent life satisfaction. *Health Education, 110*(3), 152-168.

Wittchen, H. U. & Essau, C. A. (1993). Epidemiology of anxiety disorders. In A.M. Cooper (ed.). *Psychiatry*. Philadelphia: J.B. Lippencott Company (pp.1-25).

Wong, H. Y., Jenvey, V., & Lill, A. (2012). Children's self-reports and parents' reports of internalizing and externalizing problems in Chinese and Anglo-Celtic children in Austalia. *Australian Journal of Psychology, 64*, 155-163.

Wood, J. McLeod, B. D., Sigman, M., Hwang, W. C., & Chu, B. C. (2003). Parenting and childhood anxiety: Theory, empirical finding and future directions. *Journal of Child Psychology and Psychiatry, 44*, 134-151.

Wool, C. A., & Barsky, A. J. (1994). Do women somatize more than men? Gender differences in somatization. *Psychosomatics, 35*, 445-452.

World Health Organization, (1992). *ICD-10 : The ICD-10 Classification of Mental and Behavioural Disorders : Clinical Descriptions and Diagnostic Guidelines*. Geneva: World Health Organization.

World Health Organization, (2001). *Mental Health, A Call for Action by World Health Ministers*. Geneva: World Health Organization. Retrieved from http://www.who.int/mental_health/media/en/249.pdf.

World Health Organization (2002). *Gender and Mental Health*. Geneva: World Health Organization. Retrieved from http://whqlibdoc.who.int/gender/2002/a85573.pdf.

World Health Organization. (2007). *What is mental health?* Retrieved from http://www.who.int/features/qa/62/en/index.html.

World Health Organization. (2009). *Child and Adolescent Health and Development, Highlights, Progress report 2009*. Retrieved from http://whqlibdoc.who.int/publications/2010/9789241599368_eng.pdf.

Yabuuchi, A. (2004). Face in Chinese, Japanese, and U.S. American cultures. *Journal of Asian Pacific Communication, 14*, 261-297.

Yarcheski, A., Mahon, N., & Yarcheski, T. (2002). Anger in early adolescent boys and girls with manifestations. *Nursing Research, 51*, 229-236.

Young, M. E., Galvan, T., Reidy, B. L., Pescosolido, M. F., Kim, K. L., Seymour K., & Dickstein, D. P. (2013). Family functioning deficits in bipolar disorder and ADHD in youth. *Journal of Affective Disorders,* Retrieve from http://dx.doi.org/10.1016/j.jad.2013.04.027.

Youngblade, L. M., Theokas, C., Schulenberg, J., Curry, L., Huang, I. C., & Novak, M. (2007). Risk and protective factors in families, schools and communities: a contextual model of positive youth development in adolescents. *Pediatrics, 119*(1), 47-53.

Youniss, J., & Smollar, J. (1985). *Adolescents' relations with mothers, fathers and friends*. Chicago: University of Chicago Press.

Zahn-Wexler, C., Klimes-Dougan, B., & Slattery, M. J. (2000). Internalizing problems of childhood and adolescence: Prospects, pitfalls, and progress in understanding the development of anxiety and depression. *Development and Psychopathology, 12*, 443-446.

Zahn-Wexler, C. Shirtcliff, E. A., & arceau, K. (2008). Disorders of childhood and adolescence: Gender and psychopathology. *Annual Review of Clinical Psychology, 4*, 275-303.

Zimmerman, F. J. (2005). Social and economic determinants of disparities in professional help-seeking for child mental health problems: Evidence from a national sample. *Health Service Research, 40*, 1514-1533.

Zwaanswijk, M., Van Der Ende, M. S. J., Verhaak, P. F. M., Bensing, J. M., & Verhulst, F. C. (2003). Factors associated with adolescents mental health services need and utilization. *Journal of America Academy of Child and Adolescent Psychiatry*, *42*(6), 692-700.